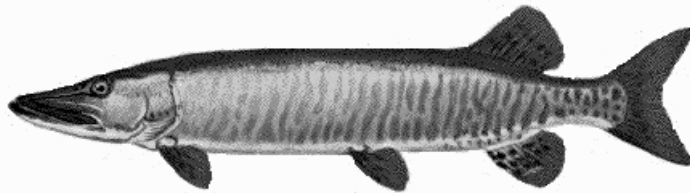


Wisconsin Department of Natural Resources 2016-2017 Ceded Territory Fishery Assessment Report



Thomas A. Cichosz

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Walleye illustration Virgil Beck

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INTRODUCTION

The northern portion of Wisconsin, encompassing 22,400 square miles and including all or parts of 30 counties, was ceded by the Lake Superior Chippewa Tribes to the United States in the Treaties of 1837 and 1842 (Figure 1). Although the lands were ceded to the United States, the Chippewa Tribes retained hunting, fishing, and gathering rights throughout this area (USDI 1991). The Wisconsin Ceded Territory contains 77% of Wisconsin's lakes accounting for 53% of the total inland lake surface acreage in Wisconsin (Staggs et al. 1990). Of lakes within the Ceded Territory, over 900 contain walleye (*Sander vitreus*) and more than 600 contain musky (*Esox masquinongy*), and the vast majority of naturally reproducing walleye and musky populations are found within the Ceded Territory.



Figure 1. Map of Wisconsin showing the Ceded Territory (shaded).

Walleye and muskellunge are tremendously popular with Wisconsin anglers and are important economically. Chippewa tribal members rely on these same fisheries for preservation of their cultural heritage and as a food source. In 1983, the United States Court of Appeals for the Seventh Circuit affirmed the rights of six Wisconsin Chippewa Bands (Bad River, Lac Courte Oreilles, Lac du Flambeau, Sokaogon, Red Cliff, and St. Croix) to fish off-reservation waters in the Wisconsin Ceded Territory. Tribal fishing uses traditional methods (e.g. spearing and netting) as determined by Treaties of 1837 and 1842 between the Bands and the United States government. Since affirmation of tribal fishing rights in 1983 the Wisconsin Department of Natural Resources (WDNR) has worked to integrate tribal harvest opportunities with sport fisheries in the Ceded Territory.

To facilitate and manage shared tribal and recreational angler harvest, an intensive data collection and analysis effort began in 1987. The program evolved as knowledge of unique aspects of the Ceded Territory shared fisheries increased, and developed into the current program in 1990. The primary goal is to collect information essential to protecting Ceded Territory fish populations from over-exploitation by the combined tribal and recreational fisheries.

As part of this effort WDNR works with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) to establish safe harvest quotas for walleye and muskellunge and to monitor the shared fisheries throughout the Ceded Territory. The majority of tribal harvest occurs during spring while walleye and muskellunge are congregated in shallow water to spawn and are readily taken by spear. A smaller number are harvested throughout the remainder of the year with a variety of capture methods including spearing, gill netting, fyke netting, set-lining, and angling. Netting and spearing are highly efficient methods and, unlike low efficiency methods such as angling, are not self-regulating (Beard et al. 1997, Hansen et al. 2000). Based on the inclusion of high efficiency tribal harvest in these fisheries, over-exploitation is a strong possibility in the absence of intensive management and could result in long-lasting and potentially irreversible damage.

Wisconsin DNR gathers data from a representative sample of lakes throughout the Ceded Territory each year in order to assess abundance and stability of walleye populations. Walleye populations are evaluated by WDNR using three primary methods: spring adult and total population estimates, fall age-0 (young-of-year) relative abundance estimates, and creel surveys of angler catch and

harvest. When combined, these methods provide information on the current harvestable population, an indication of the future harvestable population, and the degree of exploitation in the walleye fishery.

Wisconsin DNR also conducts muskellunge and black bass *Micropterus* spp. population estimates each year and estimates harvest of these species via creel surveys; WDNR does not quantify recruitment of these species via young-of-year (YOY) surveys.

Population estimates are critical to the management of Ceded Territory fisheries. Accurate population estimates allow calculation of “safe harvest” levels that allow harvest while minimizing the potential of jeopardizing a species’ future abundance or persistence.

Creel surveys provide vital information about the use of fisheries by recreational anglers, including angling effort, catch, and harvest; Estimates from surveyed lakes can be extrapolated across larger areas (e.g. Ceded Territory). When coupled with population estimates, creel harvest data can be used to estimate angler exploitation for individual species. The WDNR treaty fisheries program focuses primarily on game species (walleye, muskellunge, largemouth *Micropterus salmoides* and smallmouth *Micropterus dolomieu* bass, and northern pike *Esox lucius*), but creel information on all species is recorded.

In support of this effort, data is collected and provided by GLIFWC and the United States Fish and Wildlife Service (USFWS) which conduct spring adult population estimates and fall age-0 surveys on additional lakes each year. Tribal harvest data is made available by GLIFWC which censuses open-water tribal harvest of all species and conducts periodic creel surveys to assess winter harvest of muskellunge through the ice.

This annual report summarizes WDNR efforts related to management of the shared Ceded Territory fishery from early 2016 through early 2017. In doing so, it reports on one ‘annual cycle’ of work related to management of these fisheries. The typical annual cycle begins with establishment of safe harvest levels prior to spring spearing activities, includes conducting creel surveys, population estimates, and YOY walleye surveys on selected lakes, and results in summarization of tribal and angler exploitation rates for Ceded Territory lakes¹.

¹ For the purposes of this report ‘Tribal’ refers to catch and harvest by traditional methods used by tribal fishers (e.g. spearing and netting); ‘Angler’ indicates catch and harvest by hook and line, and may include tribal members angling during open seasons if interviewed during creel surveys.

METHODS

Estimation of Population Size

With more than 900 walleye lakes and 600 muskellunge lakes in the Wisconsin Ceded Territory it is logistically impossible to obtain precise population estimates from all lakes in a single year. In addition, fish populations in general and walleye populations in particular are extremely variable and can change dramatically from year to year. Therefore, WDNR selects several lakes each year for walleye population estimates and corresponding nine-month creel surveys². The lakes sampled by the WDNR within the Ceded Territory during 2016-17 were chosen using a stratified random design considering size, historic level of tribal harvest, and primary walleye recruitment source. Of the lakes sampled each year, four are 'trend lakes' which are evaluated every three years to provide meaningful data on temporal trends within walleye populations; trend lakes sampled in 2016 were Middle Eau Claire (Bayfield Co.), Lipsett (Burnett Co.), Metonga (Forest Co.) and Trout (VilasCo.) lakes. In addition, at least one large lake or lake chain is chosen to be surveyed each year. In 2016 the Pike Chain (includes Buskey Bay, Hart, Millicent and Twin Bear lakes, Bayfield Co.), Red Cedar (Barron Co.), Long (Chippewa Co.), Turtle Flambeau Flowage (Iron Co.), Lac Courte Oreilles (Sawyer Co.), and Cedar (St Croix Co.), lakes were large waters successfully sampled.

The continuing randomized survey of lakes throughout the history of this program (Appendix A) provides data necessary for successful management of the shared fisheries. Data from lake surveys is used to estimate walleye population size and derive safe harvest levels, estimate tribal and angler harvest and exploitation rates, examine temporal and spatial trends in walleye populations and angler effort, and maintain up to date characterizations of population status for each lake.

Walleye

Walleye spawning population estimates³ for various lakes in the Ceded Territory were made using a standard mark-recapture methodology. Walleyes were initially captured for marking using fyke

² Creel surveys are conducted from the first Saturday in May through early March and correspond to the Wisconsin open season for game fish species. The month of November was excluded from analyses due to poor ice conditions and low angler effort.

³ Spawning population estimates may be less than adult population sizes if all adults do not spawn in every year. The degree to which this occurs in Wisconsin is currently unknown and may vary by lake.

nets shortly after ice out. Each fish was measured (total length; inches and tenths) and marked with one of two lake specific fin clip; two clips were used in each lake to classify fish as either 'adult' or 'juvenile'. Adult (mature) walleyes were defined as all fish 15" or longer and all fish for which sex could be determined (regardless of length). Walleye of unknown sex less than 15" long were classified as juvenile (immature). In lakes where previous estimates of walleye spawner abundance were available, the goal was to mark 10% of the anticipated spawning population. Where no preliminary abundance estimate was available, at least one walleye per acre of lake surface area was targeted for marking. Marking continued until the target number was reached or spent females began appearing in the fyke nets.

Two electrofishing recapture runs were conducted in each lake and the data used to estimate abundance of the spawning or total walleye population. Due to rapid dispersal and decreased vulnerability of adult walleye following spawning, only mark-recapture results from the first electrofishing recapture run were used to estimate spawning walleye abundance; results from the second electrofishing recapture run could augment those results when estimating total walleye population abundance.

Walleyes were initially recaptured with AC electrofishing gear within one week (typically 1-4 days) after netting and marking were completed. In each lake, the entire shoreline (including islands) was sampled to ensure equal vulnerability of marked and unmarked walleyes to capture. All walleyes in the captured were measured and examined for marks; in most lakes, any unmarked walleyes collected in the first electrofishing run were fin clipped accordingly for the lake and fish maturity. A second whole-shore electrofishing recapture run was conducted approximately 1-4 weeks after the first electrofishing run.

Based on electrofishing recapture data, population estimates were calculated with the Chapman (1951) modification of the Petersen Estimator as:

$$N = \frac{(M + 1)(C + 1)}{(R + 1)}$$

where N was the population estimate, M was the number of fish marked and released, C was the total number of fish captured and examined for marks in the recapture sample, and R was the total number of marked fish observed in C.

The Chapman Modification method was used because it provides more accurate population estimates in cases when R is relatively small (Ricker 1975). Walleye population and variance estimates

were calculated by length-class ($\leq 11.9''$, $12-14.9''$, $15-19.9''$, and $\geq 20.0''$) and summed accordingly to estimate adult and total walleye abundance.

Fish population size structure is described using proportional stock density (PSD) and relative stock density (RSD) as reviewed by Anderson et al. (1996). Walleye size data were analyzed to compare proportions of both quality (PSD) and preferred (RSD) length fish gathered in spring surveys (April and May); data were limited to spring surveys to minimize bias associated with fish growth throughout the year and to best characterize the size structure of walleye populations near the outset of the harvest seasons. For the purpose of this report stock, quality and preferred walleye lengths were set at 12, 15 and 18 inches, respectively. Walleye length data were taken from WDNR statewide PSD/RSD database. Proportional stock density (PSD) is calculated as:

$$PSD = \frac{\text{number of fish} \geq 15 \text{ inches}}{\text{number of fish} \geq 12 \text{ inches}} \times 100$$

Relative stock density (RSD) is calculated as:

$$RSD = \frac{\text{number of fish} \geq 18 \text{ inches}}{\text{number of fish} \geq 12 \text{ inches}} \times 100$$

Muskellunge

Muskellunge population estimates were conducted over a two-year period, with marking in year-1 and recapture in year-2. In year-1, muskellunge were marked during fyke netting and electrofishing efforts throughout the sampling season. All muskellunge 20" and larger were given a primary fin clip (the same clip given to adult walleye and bass). Muskellunge less than 20" long were given an alternate fin-clip (generally top caudal). In year-2, muskellunge were recaptured using fyke nets in mid-May, to coincide with the muskellunge spawning season. Adult muskellunge population estimates (considered all sexable fish of any size, plus all fish of unknown sex $\geq 30''$ at the time of marking) were made using Chapman modification of the Petersen estimate:

$$N = \frac{(M + 1)(C + 1)}{(R + 1)}$$

where N is the estimated adult population size; M is the total number of muskellunge marked in the lake in year-1 equal to or larger in length than the smallest sexable fish; C is the number of muskellunge recaptured in year-2, excluding fish smaller than the minimum length counted in year-1 plus 2 inches; and R is the number of marked fish recaptured (Wisconsin Technical Working Group 1999; Margenau and AveLallemant 2000).

Largemouth and Smallmouth Bass

In a subset of sampled lakes designated as “comprehensive survey” lakes, largemouth *Micropterus salmoides* and smallmouth *Micropterus dolomieu* bass encountered during fish surveys were marked by fin clips. Bass larger than 12.0” were given the same primary (adult) fin-clip as was given to walleye in the same lake; bass 8.0- 11.9” were given the secondary (juvenile) fin-clip for the lake. In these lakes, fyke nets were set just after ice-out in the spring and again after the first electrofishing recapture run. A total of four electrofishing surveys were conducted in each lake. The first electrofishing run was conducted within a week of pulling the early fyke nets. The second run was conducted approximately two weeks after the first electrofishing run. Third and fourth electrofishing runs were conducted at approximately weekly intervals thereafter between mid-late May and mid-June. The entire shoreline of the lake (including islands) was sampled. Bass populations were estimated after both the third and fourth runs. For each bass species population estimates were calculated for various size classes (8.0-13.9”, 14.0-17.9” and ≥ 18.0 ”) using the same Chapman modification of the Petersen estimator as described for walleyes. The recapture run yielding the population estimate with the lowest coefficient of variation is reported.

Establishment of Safe Harvest

The Wisconsin joint fishery is managed by calculating total allowable catch and ‘safe harvest’ levels for walleye and muskellunge on a lake-by-lake basis. Safe harvest is set such that the risk of exceeding 35% exploitation for walleye or 27% for muskellunge is less than 1-in-40 (Hansen 1989; Hansen et al. 1991). This risk-management system differs from a quota system, which would potentially close fisheries once a harvest cap was reached. Beginning in the spring of 2015 management of angler exploitation began using a ceded territory wide 3 walleye/day angler bag limit and more restrictive size

limits than previously in place for most lakes. This system replaced the “sliding bag-limit” system in place since 1990 under which bag limits ranged from 1-5/day and were determined based upon tribal declarations and harvest (Cichosz 2016).

Safe harvest levels are set on all Ceded Territory walleye and muskellunge lakes using the most accurate population estimates available. The most reliable estimates are clearly taken from mark-recapture estimates performed in the same year for which safe harvest is calculated. However, because the temporal overlap of the spearing season and spring population estimate sampling make this logistically impossible, these population estimates are used to estimate abundance for the following two years. In addition, given the year-to-year variability associated with fish populations, safety factors are incorporated to account for the largest potential decrease between years (Hansen et al. 1991).

Population estimates older than two years are not considered to accurately represent a lake’s current population and are not directly used to set safe harvest. In this case, an estimate is calculated from a log-linear mixed effects regression model using lake acreage and lake-specific deviations from the overall intercept as predictors of population abundance (Hansen et al. 2015)⁴. Data inputs were limited to the previous 20 years of data, and for lakes with multiple population estimates all individual data points were incorporated into the model (unlike prior regression methods which used all data regardless of age, and averaged population estimates for each lake before their incorporation into the regression model; Hansen 1989). Three regression models are used depending on the primary source of walleye recruitment in the lake (Nate et al. 2000). Separate models are used for: (A) lakes sustained primarily by natural reproduction (NR; Figure 2), (B) lakes sustained primarily through stocking efforts (ST), and (C) lakes with low density populations maintained through intermittent natural reproduction (REM). Figure 2 shows the benefit is using a mixed effects model to better define safe harvest levels in lakes of similar area where measured walleye abundance differs dramatically, with the lake-specific deviations used to apply more harvest where more fish exist, and less harvest where less fish exist. Refer to Appendix B for a complete description of recruitment code designations used for lakes throughout the Wisconsin Ceded Territory. Mixed-effects regression models are used to set safe harvest yearly for the majority of the walleye lakes in the Ceded Territory.

⁴ 2016 was the first year in which the mixed-effects model was used for setting of safe harvest. Prior to 2016 a log-linear regression relying solely on lake area as a predictor of walleye abundance was utilized (Hansen 1989; Cichosz 2016).

A similar method is employed to set safe harvest for muskellunge. Because muskellunge mark-recapture surveys are conducted over a two-year period, a population estimate for a given lake is employed to directly set safe harvest only once. In the absence of a recent population estimate, a simple log-linear regression model is used to make an estimate of muskellunge abundance. However, population predictions in this model are based on lake acreage using all available data (regardless of age) and averages multiple estimates for individual lakes prior to input to the model; a single model is used for all muskellunge waters in the Ceded Territory (Figure 3).

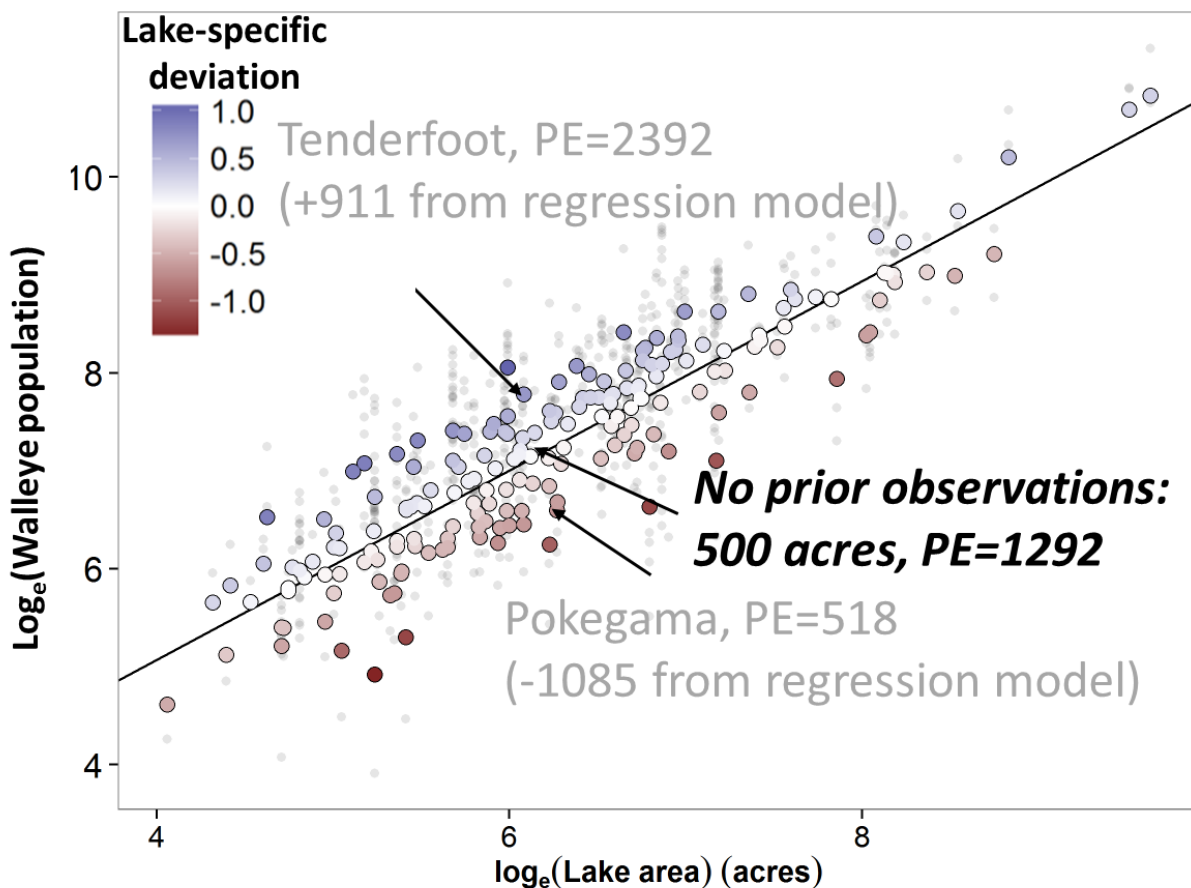


Figure 2. Generalized view of how lake-specific deviations in a mixed effects model better differentiates high or low-density walleye waters to more appropriately allocate safe harvest relative to the more basic regression model (Hansen et al. 2015). Individual models are developed for Natural, Stocked, and Remnant walleye populations.

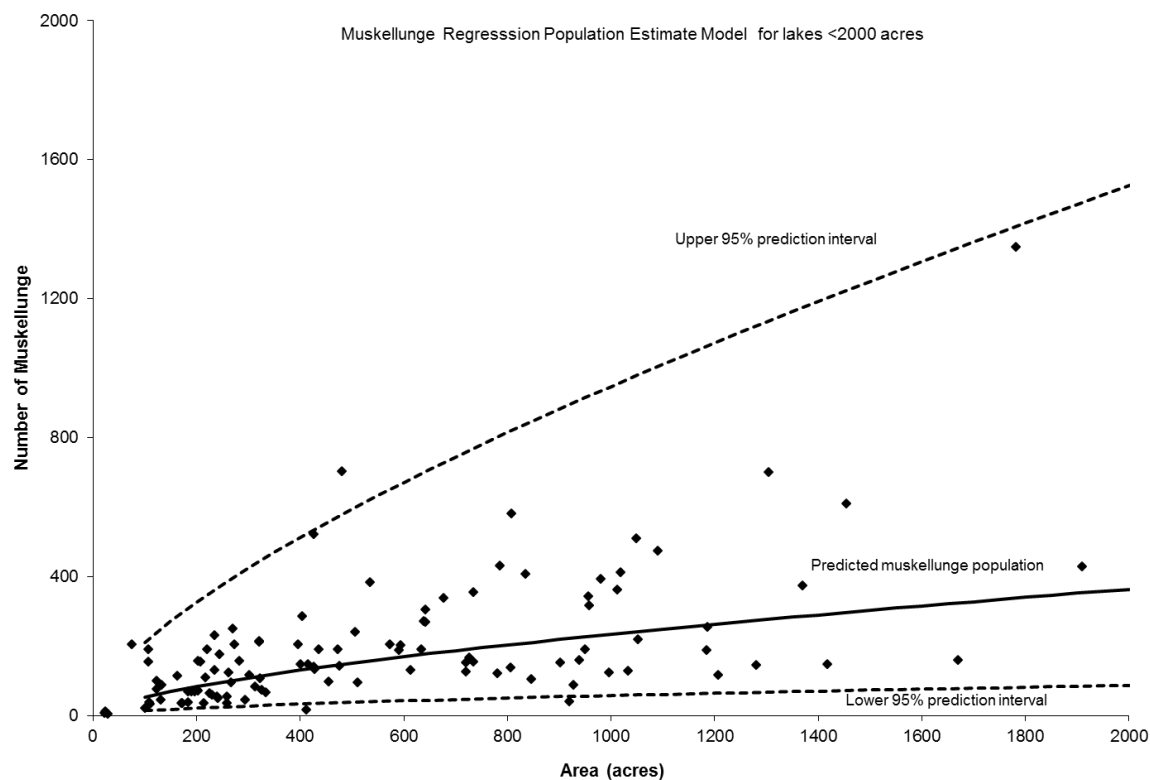


Figure 3. Regression model used to set 2016 safe harvest levels for muskellunge populations in lakes <2000 acres (applies to all lakes; only lakes <2000 acres are shown for illustrative clarity).

Estimating Fishing Effort and Harvest

Tribal Harvest and Exploitation

In lakes where current walleye population estimates are available, tribal harvest numbers are used in conjunction with population estimates to estimate tribal exploitation of walleye populations. Tribal harvest numbers for individual lakes are supplied to WDNR by GLIFWC and encompass all tribal harvest methods used (e.g. spring or winter spearing, netting). Tribal exploitation was estimated as the total number of adult walleyes harvested divided by the adult population estimate for the same lake (C/N; Ricker 1975).

Angler Harvest and Exploitation - Creel Surveys

Creel surveys are generally conducted each year in the same lakes in which a walleye population estimate is done. Coordinating efforts in this way allows for year-long recovery in the creel of fish marked during spring population estimates, and subsequently allows for estimation angler exploitation of walleye.

WDNR creel surveys use a random stratified roving access design (Beard et al. 1997; Rasmussen et al. 1998). The surveys were stratified by month and day-type (weekend / holiday or weekday), and creel clerks conducted their interviews at random within these strata. Surveys were conducted on all weekends and holidays, and two to three randomly chosen weekdays per week. Angler effort was recorded twice daily based on instantaneous counts of angler activity.

Clerks counted the number of anglers and recorded effort, catch, harvest, and targeted species from anglers completing their fishing trip. Clerks also measured harvested fish and recorded any fin-clips observed. Only completed-trip interview information was used for analyses. Information from interviews was expanded over the appropriate stratum to provide an estimate of total effort, catch, and harvest of each species in each lake for the year. Creel data were summarized according to lake size, population recruitment source and current state regulations (Appendix C). In cases where lakes were connected (as either defined or undefined chains), creel clerks were not necessarily present at each individual lake on a given day; however, during the interview clerks collected information specific to lakes within the chain thereby enabling creel related estimates to be determined for individual lakes.

Angling effort was estimated for each stratum and summed across all strata to estimate total angler effort for each lake (angler hours/lake). Angler catch and harvest (hours/fish) rates were calculated for each game fish species encountered, giving an indication of average angler success and providing an index of the relative abundance of each species. Species-specific catch and harvest rates were calculated using only species-specific fishing effort. General catch and harvest rates were calculated using total angler effort, regardless of the species targeted.

Tribal and angler walleye exploitation rates were calculated in lakes where adult population estimates and creel surveys were conducted. Angler exploitation rates for adult walleye were calculated by dividing the estimated number of marked fish harvested by the total number of marked fish present in the lake (R/M; Ricker 1975). Although anglers can harvest immature walleye in some waters, only adult

walleye exploitation rates were calculated. Total adult walleye exploitation rates were calculated by summing angling and tribal exploitation.

Young-of-Year Walleye Surveys

Electrofishing for YOY walleyes was done after sunset in early autumn, beginning when water temperatures had fallen below 70° F. In most cases, the entire shoreline of a lake was electrofished and all sub-adult walleyes were examined and measured. Two-sample t-tests were used to test various hypotheses: that YOY density (fish/mile shocked) observed in natural and stocked model lakes was equal during 2016, that within each recruitment model the YOY density observed in 2016 did not differ from the average over the previous 26 years (1990-2015), and that in stocked model lakes YOY density did not differ between those lakes that were stocked and those that were not stocked during 2016. A general linear model was used to evaluate the effects of recruitment model (natural or stocked), year, and the year*model interaction on YOY walleye/mile over time. The interaction term was evaluated as indicative of significant trends over time in YOY walleye/mile for lakes within one or both recruitment models.

Hansen et al. (2004) updated a previous analysis by Serns (1982) to establish a relationship between the number of YOY walleyes collected per mile of shoreline electrofished and their lake-wide density (#/acre) where:

$$Density = 0.0345 * (Catch\ per\ mile)^{1.564}$$

The Hansen et al. (2004) metric of YOY density is used in evaluation of differences between various lake classes (e.g. Natural or Stocked recruitment model lakes). Use of the Hansen et al. metric for this purpose began with the 2006-2007 annual report; in years prior to 2006 the Serns index was used for the same purpose.

To assess any potential for natural reproduction, a portion of lakes classified as 'stocked', 'remnant', or where the primary component of year class strength is uncertain are selected to receive fish with an internal oxytetracycline (OTC) otolith mark. A proportion of the YOY fish sampled from these lakes in the fall were sacrificed to assess the relevant contribution of stocking to the number of surviving YOY fish and to provide evidence of any contribution by natural reproduction.

RESULTS AND DISCUSSION

Population Estimates and Densities

In 2016, spawning walleye populations were estimated in 30 lakes, ranging in size from 88 to 13,122 acres and representing a range of walleye recruitment categorizations and angler regulations (Table 1; Appendix D). Due to sample size restrictions, separate analyses were conducted to evaluate differences in spawner population size across (1) primary recruitment source (natural, stocked, or remnant; refer to Appendix B) and (2) angling regulations in place during the 2016-17 angling season. Statistical comparisons were made for spawner density (fish/acre) which provides a better comparative measure across lakes of varying size (relative to spawner abundance).

All population estimates were reviewed by a Technical Working Group (TWG) for reliability. Factors considered in determining reliability of estimates included numbers of fish marked and/or recaptured by sex and in total and coefficients of variation associated with derived estimates. In cases where population estimates are not deemed reliable by the TWG, estimates are rejected for use in setting safe harvest levels. For consistency across data groups, any population estimates rejected by the TWG for other purposes were also excluded from summaries and analyses presented in this report.

Consistent with most previous years, differences observed during 2016 in walleye spawner density between lakes in different recruitment classes (natural, stocked, or remnant) were statistically significant (General Linear Model, $P < 0.01$). Spawner densities observed in 2016 in lakes dominated by natural recruitment were greater than those in stocked or remnant populations (Tukey-Kramer LS Means, $P < 0.01$ and $P < 0.01$, respectively); no significant difference was found between mean spawner density in stocked and remnant-model lakes (Figure 6). Analysis of variance indicated that no significant differences in spawner density existed between lakes with varying harvest regulations (General Linear Model, $P = 0.14$).

There is no statistically significant trend in walleye spawner density in natural-model lakes (GLM, $P = 0.89$) in the Ceded Territory since 1995⁵ (Figure 4). A significant downward trend in density of stocked-model walleye waters since 1995 was noted (GLM, Slope = -0.049 , $P = 0.012$; Figure 5).

⁵ Data prior to 1995 was excluded due to a difference in the protocol used to select lakes for assessment (Hewett No Date)

Table 1. Lakes surveyed by WDNR crews in spring 2016, with corresponding information on adult (spawning) walleye population abundance and density. Only lakes with population estimates accepted for use by the TWG are shown.

WBIC ¹	County	Lake	Acres	Size Limit (in)	Recruitment Code ²	Recruitment Model ²	Adult Pop. Estimate	Adult Density (#/Acre)
Natural Model Lakes								
2109600	Barron	Red Cedar	1841	18	C-NR	Natural	7777	4.22
2742500	Bayfield	Bony	191	Slot14-18	C-NR	Natural	231	1.21
2742100	Bayfield	Middle Eau Claire	902	Slot14-18	C-NR	Natural	852	0.94
2902700	Bayfield	Pike Chain	714	Slot14-18	NR	Natural	714	1.00
2351400	Chippewa	Long	1052	18	C-NR	Natural	3545	3.37
653700	Florence	Patten	255	Slot20-24	NR	Natural	503	1.97
394400	Forest	Metonga	1991	Slot20-24	C-NR	Natural	5770	2.90
2295200	Iron	Trude	792	None	NR	Natural	1818	2.30
2294900	Iron	Turtle Flambeau Flowage	13122	None	NR	Natural	36855	2.81
418700	Oconto	Boot	235	18	C-NR	Natural	248	1.05
2390800	Sawyer	Lac Courte Oreilles	5039	Slot20-24	C-NR	Natural	7230	1.43
2046600	Sawyer	Windigo	522	1>14	NR	Natural	1063	2.04
2615100	St. Croix	Cedar	1100	Slot14-18	NR	Natural	3485	3.17
1835300	Vilas	Big Muskellunge	930	1>14	NR	Natural	3634	3.91
1629500	Vilas	Big Portage	638	Slot14-18	NR	Natural	3244	5.09
2339900	Vilas	Escanaba	293	28	NR	Natural	1895	6.47
995200	Vilas	Laura	628	1>14	NR	Natural	2728	4.34
2954500	Vilas	Lynx	339	Slot20-24	NR	Natural	468	1.38
2335300	Vilas	Sanford	88	1>14	NR	Natural	190	2.16
2112800	Washburn	Balsam	295	18	NR	Natural	552	1.87
Stocked Model Lakes								
417900	Oconto	Bass	142	18	C-ST	Stocked	212	1.49
1589600	Oneida	Sweeny	187	Slot20-24	ST	Stocked	247	1.32
2382300	Sawyer	Barber	238	Slot20-24	ST	Stocked	428	1.80
2331600	Vilas	Trout	3816	Slot20-24	C-ST	Stocked	6127	1.61
2339100	Vilas	White Sand	734	18	C-ST	Stocked	1027	1.40
2336800	Vilas	Wildcat	505	Slot20-24	C-ST	Stocked	719	1.42
Remnant Model Lakes								
2109800	Barron	Hemlock	357	18	NR-2	Remnant	352	0.99
2678100	Burnett	Lipsett	393	Slot20-24	O-ST	Remnant	111	0.28
672900	Florence	Keyes	210	18	O-ST	Remnant	65	0.31
971600	Oneida	Big Carr	213	Slot20-24	REM	Remnant	61	0.29

1 - WBIC is a Water Body Identification Code unique to each lake.

2 – Recruitment Code and Recruitment Model shown are as defined at the end of the 2016 sampling year, using the 2016 data; In previous annual reports Table 1 presented codes/models from the time the population survey was conducted, although 'end-of-year' codes were used elsewhere throughout the report. This change makes handling of recruitment codes/models consistent throughout the entire annual report.

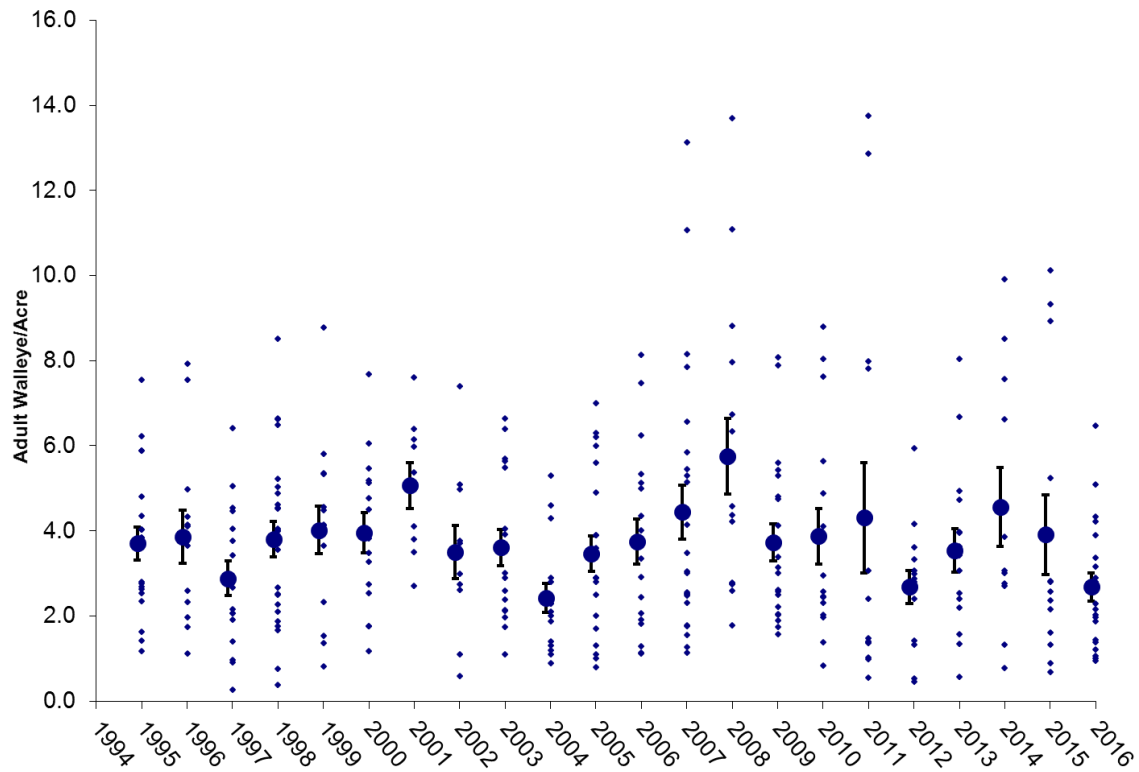


Figure 4. Adult walleye population density estimates recorded in Wisconsin Ceded Territory Lakes with populations sustained primarily by natural reproduction, 1995 – 2016. Small circles represent individual lakes; large circles represent yearly means (\pm SE).

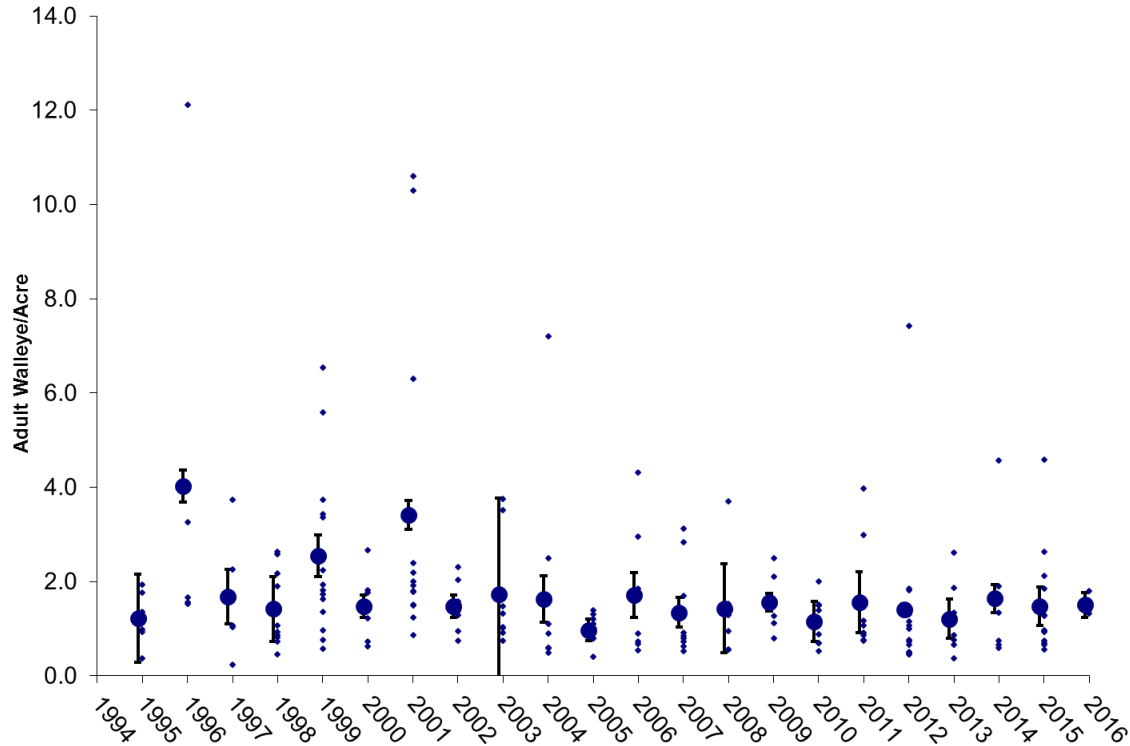


Figure 5. Adult walleye population density estimates recorded in Wisconsin Ceded Territory Lakes with populations sustained primarily by stocking, 1995 – 2016. Small circles represent individual lakes; large circles represent yearly means (\pm SE).

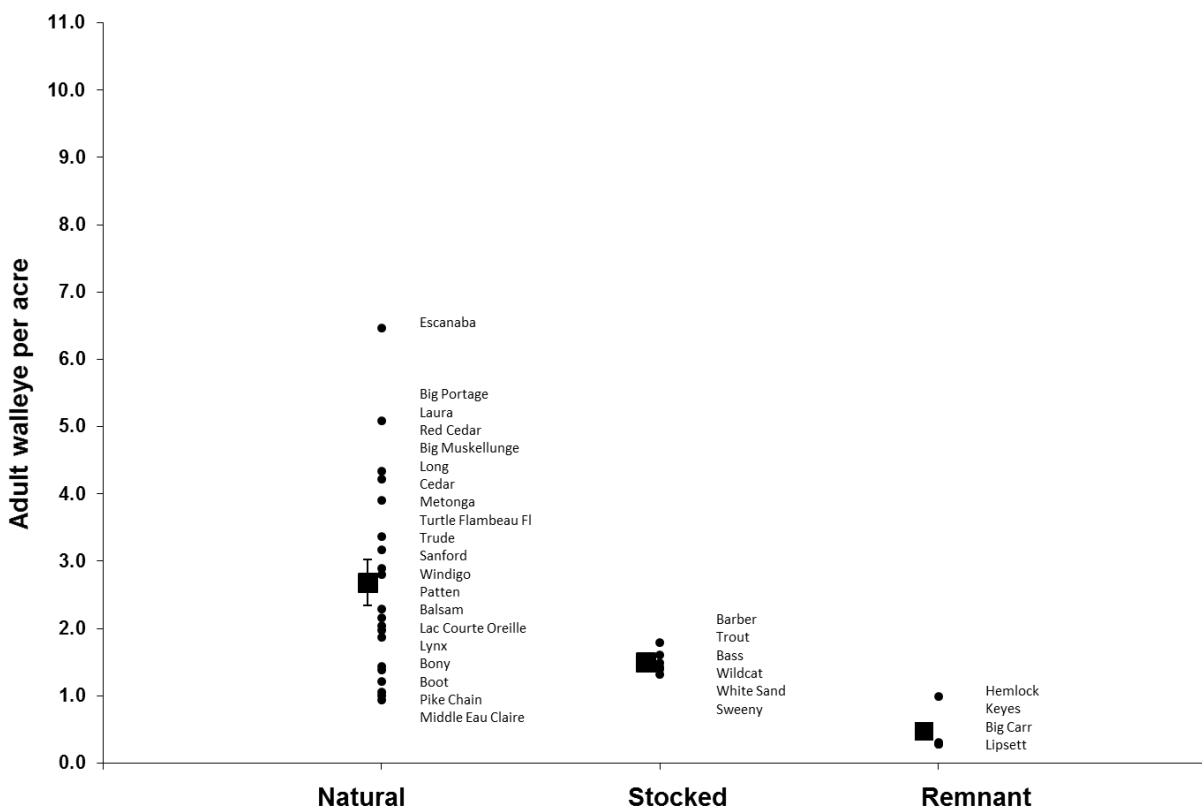


Figure 6. Adult walleye density estimates for lakes sampled by WDNR in spring 2016 based on primary population recruitment source.

Spawning Adult walleye size structure

Spawning adult walleye populations were estimated for each lake by length class in both natural (Figure 7), stocked (Figure 8), and remnant (Figure 9) production model lakes. Natural model lakes generally had higher walleye spawner densities than most stocked model lakes, which in turn had higher spawner densities than remnant model lakes. Stocked and remnant model lake populations typically have larger size structure than is seen in natural model lakes, although that did not appear to be the case for lakes sampled in 2016 when all lake models were dominated by 12-20" walleye with limited abundance of larger or smaller adult fish in the population in most sampled waters.

In natural model lakes spawning walleye abundance was highly variable and the size structure was typically dominated by 12-20" walleye, although a number of waters were notably lacking fish in the 12-15" size class, possibly indicative of past recruitment issues (Figure 7). The natural model lakes sampled had overall densities ranging from <1 to just over 6.5 fish/acre. Two of 20 sampled lakes had

walleye densities equal to or exceeding 5 fish/acre; of the remaining lakes sampled, 13 had walleye densities less than 3 fish/acre. Walleye spawning in the 7-11.9 inch category were very limited in relative abundance in most natural production lakes sampled. It is unclear if the limited abundance of small adult walleye in these waters is due to a lack of young fish recruiting into the population, fish simply not maturing at young ages (and smaller size), or some other factor.

In stocked model lakes spawning walleye abundance and size structures were less variable than that observed in natural model lakes (Figure 8). Walleye densities observed in stocked model lakes were less than 2.0 adult fish/acre in each of six lakes sampled in 2016. Despite lower fish densities than those observed in natural model lakes, stocked model lakes generally had a high percentage (e.g. >75%) of the spawning population made up of relatively large fish (>15") available for angler harvest under general statewide regulations. Remnant model lakes sampled in 2016 had abundance and size structures very similar to those noted in stocked model fisheries.

Data were available for calculation of PSD and RSD-18 for 30 natural, 17 stocked, and 19 remnant-model lakes sampled in 2016 (Table 2). In lakes where walleye regulations involve a 15" minimum size limit, calculating PSD as the percent of stock sized fish over 15" essentially makes this value a comparative tool to evaluate the percentage of harvestable fish across lakes.

There was no discernable pattern in walleye size structure noted in lakes with different recruitment classes during 2016. In natural model lakes observed PSD and RSD-18 values were highly variable, ranging from 0-99 and 0-75 percent, respectively. In stocked model lakes observed PSD and RSD values showed similar variability to natural model lakes (15-100 percent and 2-100 percent, respectively). Remnant model lakes sampled in 2016 showed PSDs and RSDs both ranging from 0-100 percent (Table 2).

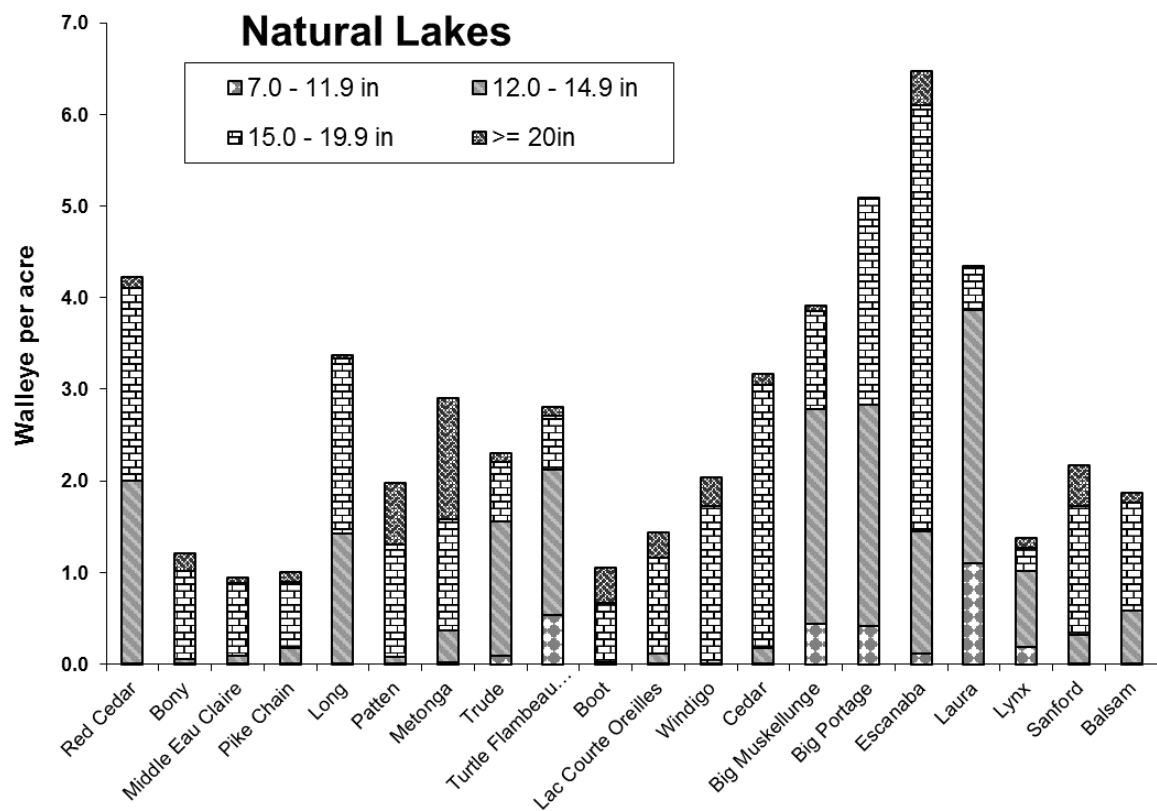


Figure 7. Size distribution of spawning walleye sampled in natural production model lakes during 2016.

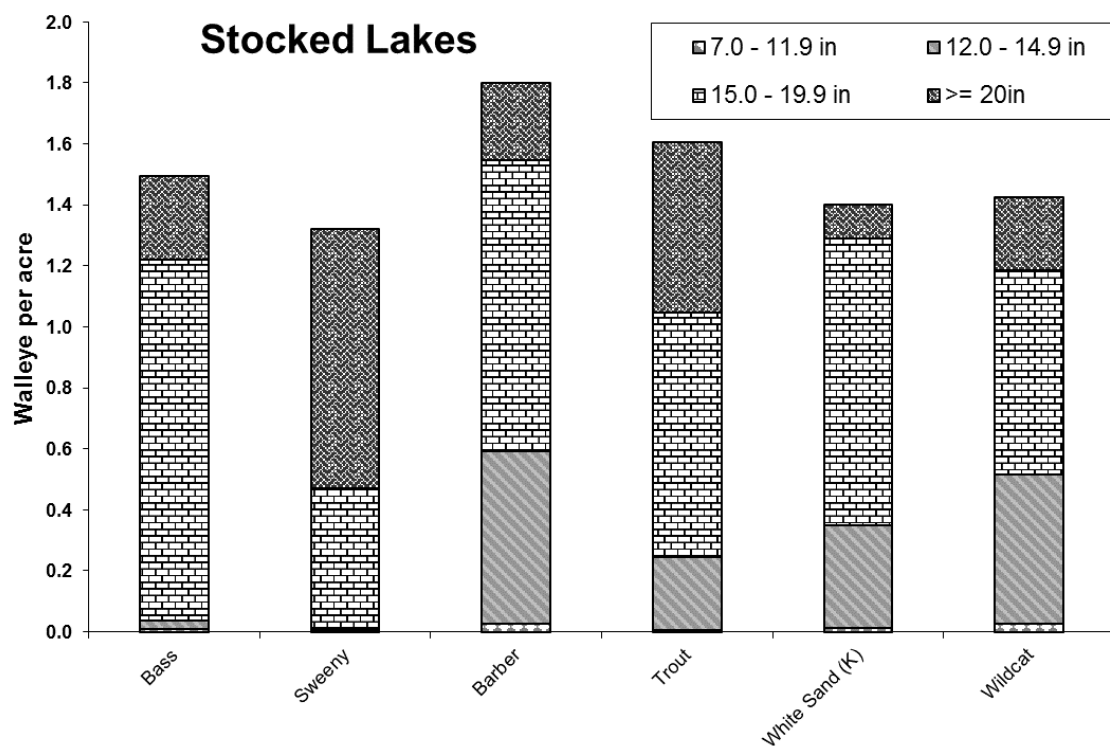


Figure 8. Size distribution of spawning walleye sampled in stocked production model lakes during 2016.

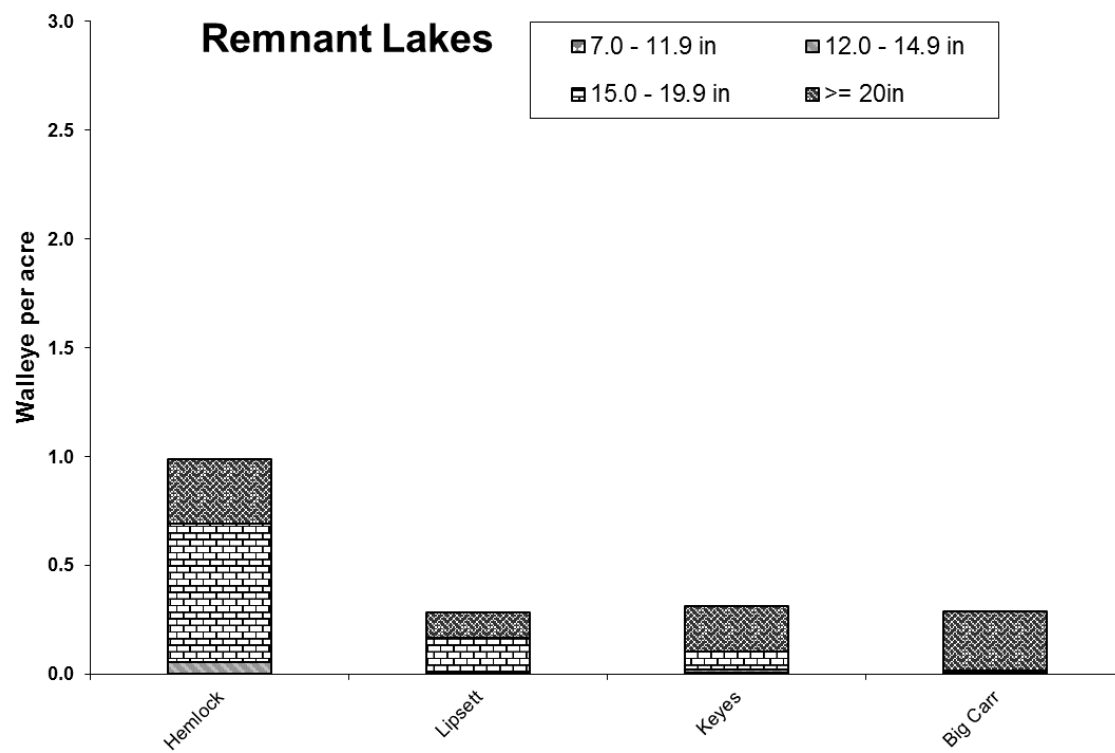


Figure 9. Size distribution of spawning walleye sampled in remnant production model lakes during 2016.

Table 2. Walleye Proportional and Relative Stock Density values for lakes surveyed in spring, 2016.

County	Lake	Acres	Recruitment Code	Walleye Regulation	PSD	RSD-18
Natural Recruitment Lakes						
Barron	Red Cedar Lake	1841	C-NR	18"	50	6
Bayfield	Bony Lake	191	C-NR	14-18" Slot	88	39
Bayfield	Middle Eau Claire Lake	902	C-NR	14-18" Slot	74	28
Bayfield	Pike Lake	17	NR	14-18" Slot	74	20
Bayfield	Upper Eau Claire Lake	996	C-NR	18"	85	67
Chippewa	Long Lake	1052	C-NR	18"	49	15
Douglas	Beauregard Lake	93	C-NR	1>14"	83	22
Douglas	Lower Eau Claire Lake	802	C-NR	18"	0	0
Eau Claire	Altoona Lake	840	NR	15"min, 20-24 Slot	45	18
Forest	Metonga Lake	1991	C-NR	15"min, 20-24 Slot	78	40
Iron	Pike Lake	165	NR	15"min, 20-24 Slot	64	35
Iron	Third Black Lake	68	C-NR	15"min, 20-24 Slot	75	75
Iron	Trude Lake	781	NR	No Minimum Size	25	5
Iron	Turtle Flambeau Flowage	13545	NR	No Minimum Size	26	3
Marathon	Big Eau Pleine Reservoir	6830	C-NR	15"min, 20-24 Slot	59	54
Marathon	Lake Wausau	1918	NR	15"min, 20-24 Slot	38	19
Oconto	Boot Lake	235	C-NR	18"	97	69
Oneida	Pelican Lake	3585	NR	15"min, 20-24 Slot	42	13
Oneida	Squaw Lake	785	NR	1>14"	3	0
Oneida	Willow Flowage	5135	NR	15"min, 20-24 Slot	51	19
Polk	Cedar Lake	1100	NR	14-18" Slot	51	24
Sawyer	Barker Lake	238	C-NR	15"min, 20-24 Slot	60	30
Sawyer	Lake Chippewa	15300	C-NR	15"min, 20-24 Slot	47	16
Sawyer	Round Lake	3054	C-NR	15"min, 20-24 Slot	67	38
Sawyer	Windigo Lake	522	NR	1>14"	99	45
Vilas	Big Muskellunge Lake	930	NR	1>14"	27	5
Vilas	Big Portage Lake	638	NR	14-18" Slot	35	3
Vilas	Lake Laura	599	NR	1>14"	12	1
Vilas	Lynx Lake	339	NR	15"min, 20-24 Slot	18	8
Washburn	Balsam Lake	295	NR	18"	72	15
Stocked Recruitment Lakes						
Iron	Sandy Beach Lake	111	ST	15"min, 20-24 Slot	93	82
Marathon	Mayflower Lake	98	ST	15"min, 20-24 Slot	64	45
Oconto	Bass Lake	142	C-ST	18"	99	52
Oneida	Lake Thompson	382	C-ST	15"min, 20-24 Slot	100	100
Oneida	Sevenmile Lake	503	C-ST	15"min, 20-24 Slot	15	2
Oneida	Sweeny Lake	187	ST	15"min, 20-24 Slot	75	56
Rusk	Chain Lake	468	C-ST	18"	65	55
Rusk	Clear Lake	95	C-ST	18"	100	100
Rusk	Island Lake	526	C-ST	18"	64	53
Rusk	Mccann Lake	133	C-ST	18"	50	50
Sawyer	Barber Lake	238	ST	15"min, 20-24 Slot	77	45
Sawyer	Spider Lake	1454	C-ST	15"min, 20-24 Slot	50	25
Taylor	North Spirit Lake	213	ST	15"min, 20-24 Slot	65	36
Vilas	Trout Lake	3816	C-ST	15"min, 20-24 Slot	71	24
Vilas	White Sand Lake	734	C-ST	18"	46	10
Vilas	Wildcat Lake	305	C-ST	15"min, 20-24 Slot	47	27

Table 2 continued on next page.

Table 2. Walleye Proportional and Relative Stock Density values for lakes surveyed in spring, 2016. Table 2. Continued.

County	Lake	Acres	Recruitment Code	Walleye Regulation	PSD	RSD-18
<u>Remnant Population Lakes</u>						
Barron	Hemlock Lake	357	NR-2	18"	83	67
Burnett	Lily Lake	176	REM	15"min, 20-24 Slot	0	0
Burnett	Lipsett Lake	393	O-ST	15"min, 20-24 Slot	100	100
Chippewa	Axhandle Lake	84	O-ST	15"min, 20-24 Slot	40	0
Clark	Mead Lake	320	O-ST	15"min, 20-24 Slot	0	0
Marathon	Mud Lake	70	O-ST	15"min, 20-24 Slot	50	0
Oconto	Crooked Lake	143	O-ST	18"	100	0
Oconto	Surprise Lake	70	O-ST	18"	50	50
Oconto	Townsend Flowage	476	O-ST	18"	100	100
Oneida	Big Carr Lake	213	REM	15"min, 20-24 Slot	100	100
Oneida	Maple Lake	144	O-ST	18"	0	0
Oneida	Pickarel Lake	736	O-ST	15"min, 20-24 Slot	100	50
Price	Spirit Lake	126	O-ST	15"min, 20-24 Slot	71	60
Sawyer	Indian Lake	84	O-ST	15"min, 20-24 Slot	20	20
Sawyer	Little Round Lake	229	O-ST	15"min, 20-24 Slot	100	100
Sawyer	Winter Lake (Price Flowage)	676	O-ST	15"min, 20-24 Slot	83	49
Taylor	Chelsea Lake	59	O-ST	15"min, 20-24 Slot	100	100
Taylor	Hulls Lake	67	O-ST	15"min, 20-24 Slot	100	100
Vilas	Big Kitten Lake	55	NR-2	15"min, 20-24 Slot	100	100

In 2016, average size structure was generally smallest in natural model lakes; stocked and remnant model lakes had similar, larger size structures on average (Figure 10). Mean PSDs for natural, stocked, and remnant model lakes were 53, 70 and 66, respectively. Mean RSD-18s for natural, stocked, and remnant model lakes were 22, 52 and 45, respectively. Differences in PSD and RSD-18 values across lakes in various recruitment models could be caused by any number of potential factors including, but not limited to, high or low recruitment levels of younger/smaller fish, differing angler regulations, harvest patterns and harvest levels, or differences in survival or year class strength leading to differences in the relative abundance of quality (PSD, ≥ 15 ") or preferred (RSD, ≥ 18 ") sized fish in some lakes relative to others.

Mean annual PSD values in both natural and stocked model lakes are trending upward over time; the regression of natural model lakes over time has a significant upward slope of 0.75 ($p < 0.01$); the regression of stocked model lakes has a non-significant upward slope of 0.51 ($P = 0.09$; Figure 11). PSD and RSD values are highly correlated in both natural and stocked model waters over time ($r^2 > 0.7$), so the trends presented for PSD values are very similar to those observed for RSD values. The implication of

increasing trends in PSD (and RSD) is that, over time, both natural and stocked model lakes are seeing an increased percentage of larger walleye in the overall population. The observed trends in PSD values could be due to introduction and increased use of size selective fishing regulations over time (e.g. minimum or protective slot categories), declining recruitment of young fish into the population, increased growth rates, or other factors.

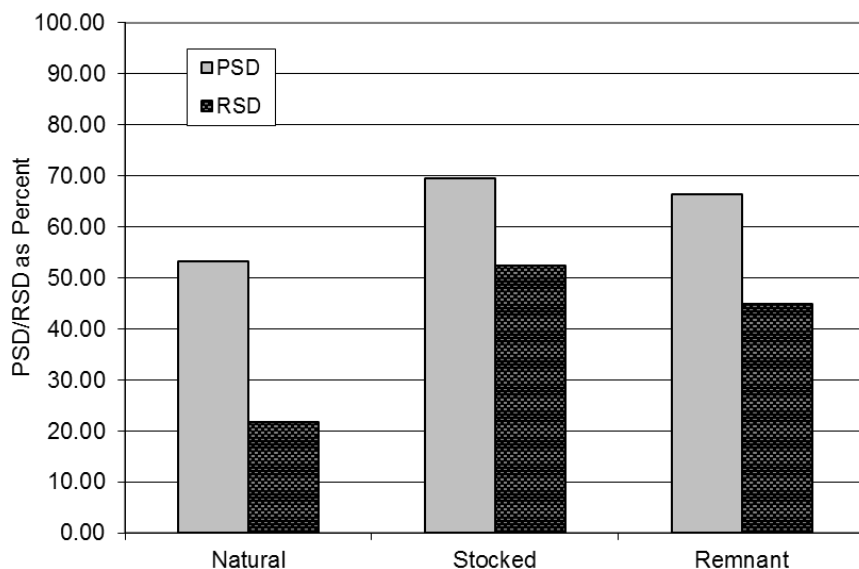


Figure 10. Comparison of mean PSD and RSD-18 values across lakes in various walleye recruitment models for lakes sampled in 2016.

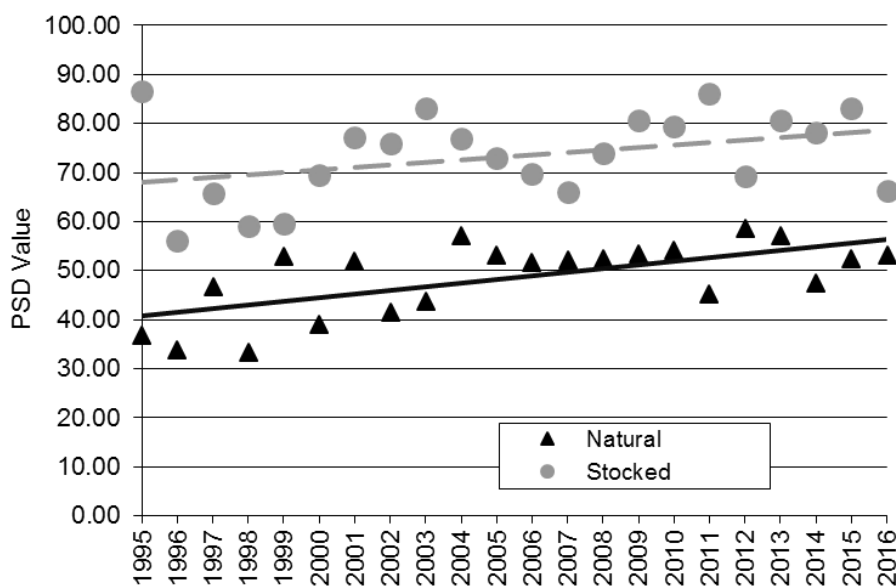


Figure 11. Trends in PSD values observed for walleye in Ceded Territory lakes since 1995.

Muskellunge Abundance

Adult muskellunge population and density estimates were completed in 13 Ceded Territory waters during spring 2016 (Table 3). Population estimates completed in 2016 reflect 2015 population numbers because of the two-year mark-recapture time span used to derive estimates. Muskellunge densities in the 13 relevant lakes ranged between 0.02 and 0.38 adult fish/ acre and did not appear to be related to lake size or angler regulations (Table 3).

Bass Abundance

Largemouth and smallmouth bass population estimates were completed in seven ten lakes, respectively, during 2016 (Table 4). Estimated largemouth bass density ranged from 0.8 fish per acre in Sweeny Lake to 8.4/acre in White Lake (Table 4). The size structure of largemouth bass populations in most lakes was dominated by fish less than 14" in length although numerous lakes had substantive contribution of larger fish (Figure 12). Smallmouth bass density was lower than that observed for largemouth bass and ranged from 0.3 – 28.0 adult fish per acre (Big Muskellunge and Nebish lakes, Vilas Co., respectively) during 2016 (Table 4), although observed size structure of smallmouth bass populations sampled were generally slightly larger than those of largemouth bass; Figure 12).

Table 3. Adult muskellunge population estimates completed in 2016 in the Wisconsin Ceded Territory. Regulations presented are for 2016.

County	Lake	Angler Regulation (inches)	Acres	Minimum length in PE (inches)		Adult PE	CV(%)	Total per acre
				Male	Female			
Chippewa	Wissota	40	6,300	25	33	176	0.34	0.03
Oneida	Two Sisters	40	719	30	30	32	0.22	0.04
Polk	Deer	40	820	28	30	252	0.08	0.31
Sawyer	Grindstone	50	3111	28	30	90	0.35	0.03
Sawyer	Lake of the Pines	40	273	23.5	27	104	0.13	0.38
Sawyer	Sand	40	928	26.5	30	42	0.19	0.05
Vilas	Big Arbor Vitae	40	1,090	30	30	205	0.38	0.19
Vilas	Escanaba	40	293	30	30	46	0.24	0.16
Vilas	Kentuck	40	958	30	30	332	0.15	0.35
Vilas	Plum	40	1033	24.5	30	70	0.21	0.07
Vilas	Sanford	40	88	24	27	21	0.14	0.27
Vilas	Snipe	40	239	20.5	30	76	0.21	0.32
Vilas	Trout	45	3,816	30	30	84	0.44	0.02

Table 4. Largemouth and Smallmouth bass population estimates for lakes sampled in the Wisconsin Ceded Territory in spring 2016.

County	Lake	Acres	Angler Regulation	Total PE	CV(%)	Total /acre	8.0-13.9" /acre	14.0-17.9" /acre	18.0"+ /acre
Largemouth Bass									
Burnett	Lipsett	393	14	2,095	26	5.3	4.2	1.2	0.0
Florence	Keyes	210	14-18 Slot	652	13.2	3.1	1.8	1.2	0.1
Florence	Patten	255	14	552	27.1	2.2	0.0	1.7	0.5
Forest	Roberts	415	14	3,342	14.4	8.1	5.1	2.9	0.1
Langlade	Moose	105	14	455	24.7	4.3	3.1	1.2	0.0
Langlade	White	153	14	1,277	28.5	8.4	5.8	2.5	0.1
Oneida	Sweeny	187	14	143	23.6	0.8	0.6	0.2	0.0
Smallmouth Bass									
Florence	Keyes	210	14-18 Slot	244	21.3	1.2	0.7	0.4	0.1
Florence	Patten	255	14	302	16.3	1.2	0.3	0.6	0.3
Forest	Lily	213	14	459	25.3	2.2	1.4	0.7	0.1
Forest	Roberts	415	14	611	19.7	1.5	0.6	0.8	0.1
Vilas	Big Muskellunge	930	18	286	11.7	0.3	0.0	0.2	0.1
Vilas	Big Portage	638	18	307	13.1	0.5	0.1	0.3	0.1
Vilas	Laura	599	14	413	32.1	0.7	0.3	0.4	0.0
Vilas	Nebish	93	9-12 Harvest Slot	2,608	--	28.0	--	--	--
Vilas	Sanford	88	14	50	--	0.6	--	--	--
Vilas	White Sand (K)	734	18	311	23.6	0.4	0.1	0.3	0.0

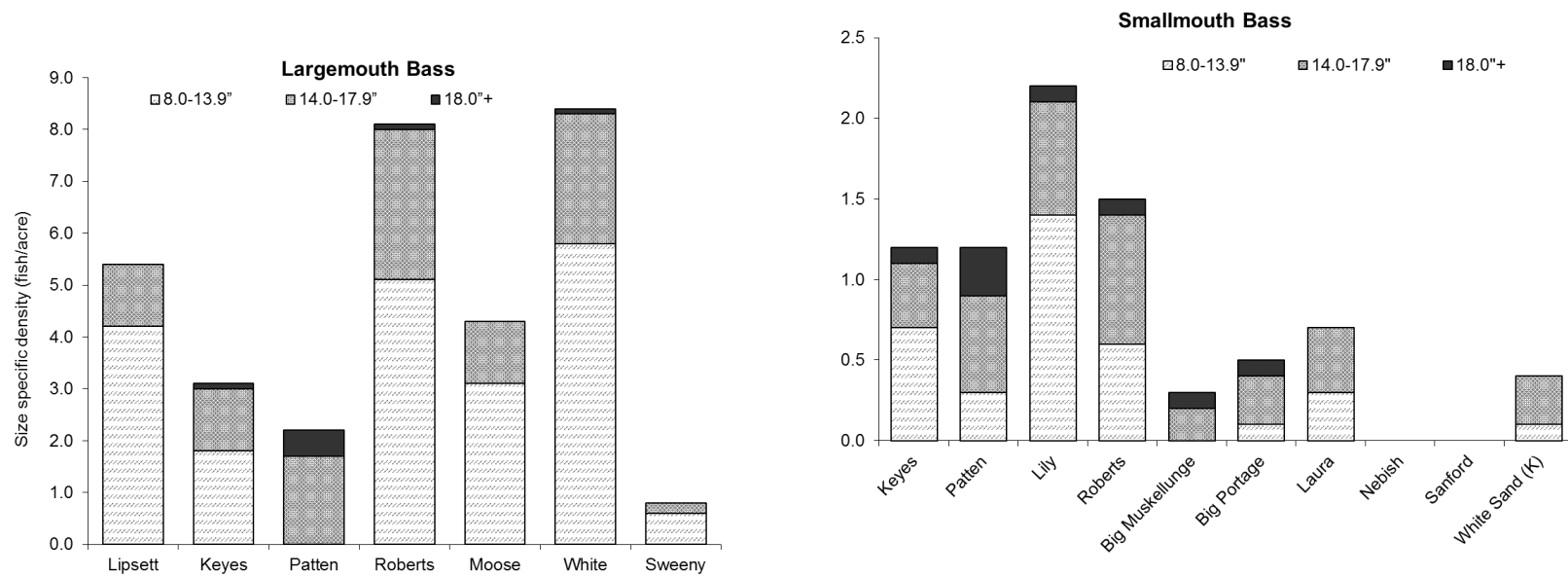


Figure 12. Large- and smallmouth bass population densities (fish ≥ 8.0 ") by size range for lakes sampled in the Wisconsin Ceded Territory in spring 2016.

Creel Surveys

In 2016-2017 (May through March), creel surveys were conducted for 16 waters in which walleye population estimates were made during spring 2016 (Appendix C). Creel surveyed lakes ranged in size from 142 to 13,545 acres (Bass Lake-Oconto Co. and Turtle Flambeau Flowage -Iron Co., respectively) and were located across eight counties within the Ceded Territory.

Overall Angler Effort

From 1995 through 2016 total angler effort has been variable but no trend has been observed across all ceded territory lakes monitored [$F(1; 419) = 1.04$, $P = 0.31$]. This finding is consistent with other studies and evaluations on angling pressure in Ceded Territory lakes (Cichosz 2010, Cichosz 2009, Hansen 2008, Deroba et al. 2007, Hennessy 2005; Figure 13). Since 1995 when random lake selection began, mean total angler effort has been significantly lower in large lakes (≥ 500 acres; 26.5 hours/ acre) than in small lakes (< 500 acres; 35.0 hours/ acre; t-test (unequal variances) $t = -3.54$, $df = 331$, $P < 0.01$). In 2016-17 the mean total angler effort per acre in large lakes (12 lakes, 15.4 hours/acre) was lower than that in small lakes (4 lakes, 30.1 hours/acre) although that difference was not statistically relevant (t-test unequal variances, $t = -0.81$, $df = 3$, $P = 0.48$).

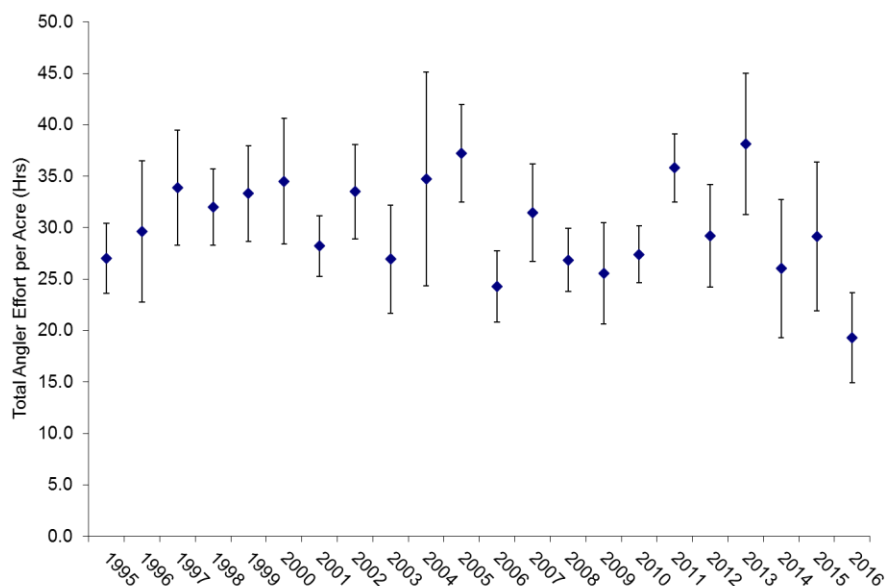


Figure 13. Average total angler effort per acre (\pm SE) in Wisconsin Ceded Territory lakes where WDNR conducted creel surveys, 1995-2016.

Walleye Effort, Catch and Exploitation

Directed effort for walleye averaged 5.4 hours per acre across lakes during the 2016-17 angling season; Directed effort is defined as hours reported by anglers fishing for a specific species. The majority (13) of creel surveys in 2016-17 were in lakes dominated by natural reproduction, with only three in those dominated by stocking; No creel surveys were conducted in lakes with remnant walleye populations. No significant difference was found in directed fishing effort for walleye between Natural- 5.96 hours/ acre) and Stocked-model lakes (3.21 hours/ acre; t-test (equal variances) $t = 1.81$, $df = 14$, $P = 0.09$) surveyed during the 2016-17 angling season. Similarly, no significant difference was found in directed fishing effort for walleye between large (≥ 500 ac., 5.71 hours/ acre) and small lakes (< 500 ac., 4.66 hours/ acre; t-test (equal variances) $t = 0.70$, $df = 14$, $P = 0.49$) surveyed during the 2016-17 angling season. Since 1995, directed angler effort (hours/acre) for walleye has shown a statistically significant downward trend [Slope = -0.26, $F(1;421) = 26.0$, $P < 0.01$] (Figure 14).

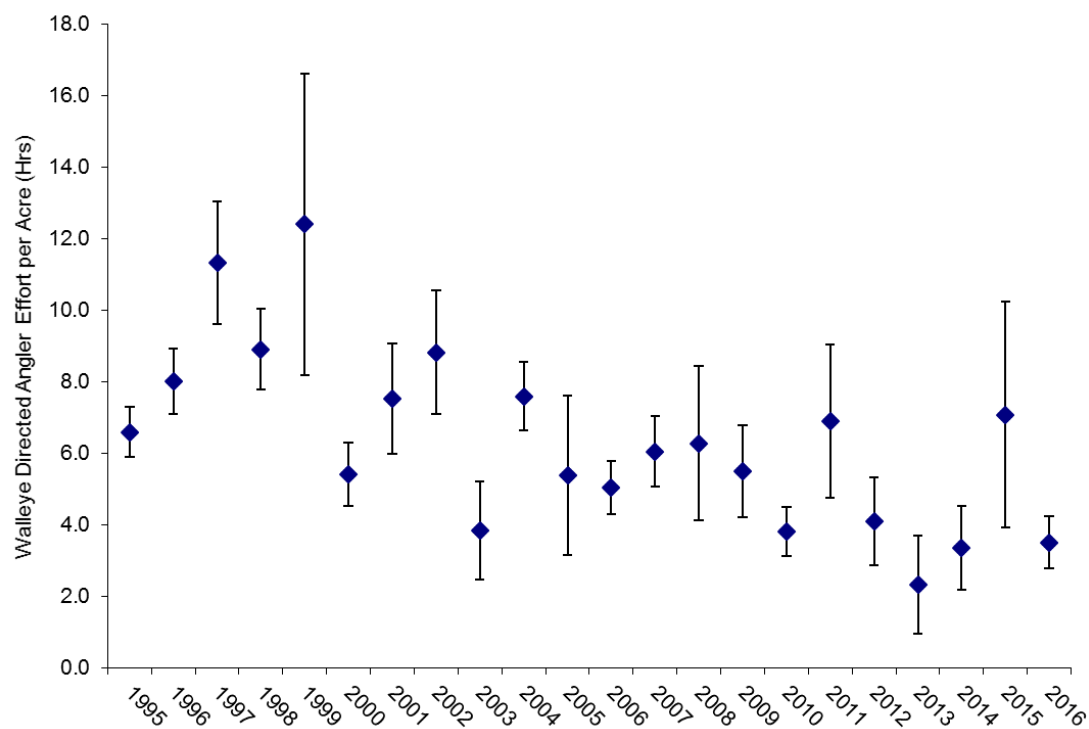


Figure 14. Directed angler effort per acre (\pm SE) for walleye in Wisconsin Ceded Territory lakes where WDNR conducted creel surveys, 1995-2016.

In 2016-17 the mean specific catch rates (SCR) was 0.17 walleye/hour of directed effort (1 fish per 5.9 walleye angling hours). In lakes with naturally sustained or stocked populations, respectively, mean SCRs were 0.18 walleye per hour (5.6 hours directed effort/ walleye caught; n=13) and 0.13 walleye/ hour (1 fish per 7.7 hours of directed effort; n=3). Specific harvest rates averaged 0.07 walleye/hour of directed effort (15 hours directed effort/walleye harvested) and ranged between 0.00 and 0.22 walleye/hour for individual lakes surveyed (Appendix C). Anglers harvested approximately 43% of all walleye caught from creeled waters during the 2016-17 season; this is well above the proportion estimated across all lakes creeled between 1995 and 2015 (28.3%), possibly due to 9 of 16 lakes creeled in 2016-17 having no minimum size restriction for walleye harvest (Appendix C).

Specific catch rate of walleye between 1995 and 2016 was highly variable, with no statistically relevant trend in SCR observed [Figure 15; Slope = -0.00, $F(1, 419) = 0.221$, $P = 0.64$]. Similarly, no discernible trend was noted for specific harvest rate by year since 1995 [Slope = 0.00, $F(1, 419) = 0.12$, $P = 0.82$] for walleye in the Wisconsin Ceded Territory (Figure 15).

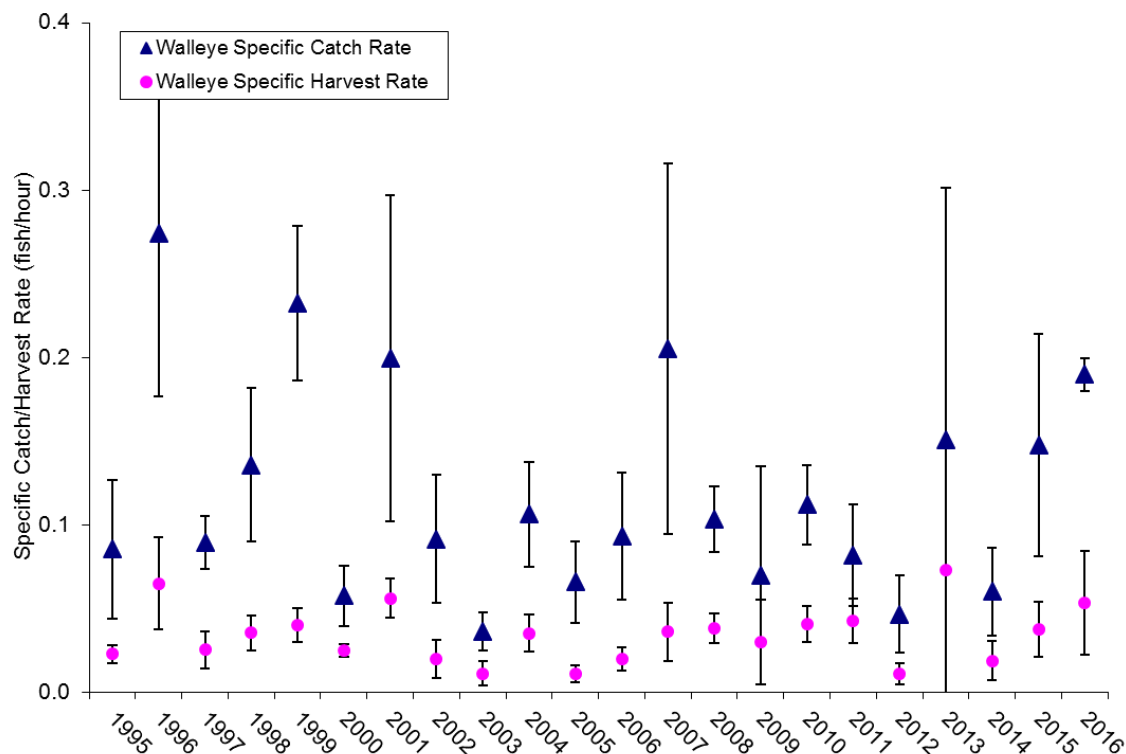


Figure 15. Specific catch and harvest rates (\pm SE) for walleye in surveyed lakes in the Wisconsin Ceded Territory, 1995-2016. Specific catch or harvest rate is number of walleye caught or harvested divided by time spent fishing specifically for walleye.

Walleye exploitation rates were estimated for 16 lakes during 2016-17 (Table 5; Appendix E). Estimates of angler walleye exploitation ranged from 0% to 24.0%; Angler exploitation of walleyes in various size classes was variable with exploitation of walleye 14" or longer ranging from 0% to 32.2% whereas that of walleyes 20" or longer ranged from 0.0% to 83.2%. Tribal exploitation of walleyes ranged from 0.0% to 30.9% across all lakes, and tribal exploitation rates exceeded those of anglers in eight of the 16 surveyed lakes. Total (angler + tribal) exploitation rates ranged from 0.0-39.0%, averaging 15.5% across lakes monitored during the 2016-17 harvest period. Based on 2016-17 survey results angler exploitation of walleye populations was estimated as zero in two of 16 lakes surveyed; three of the 16 lakes surveyed incurred no tribal exploitation of walleye.

Safe harvest limits are set so that over time there is less than a 1-in-40 chance that exploitation will exceed 35% in any given year on any single lake. In 2016-17 total walleye exploitation was below 35% in 14 of 16 lakes evaluated, with Middle Eau Claire (Bayfield Co.) and Big Musky (Vilas Co.) lakes being the exceptions (35.9 and 39.0% total walleye exploitation, respectively Table 5).

Table 5. Adult walleye exploitation rates by lake and harvest type for 2016, with comparison to 1995-2015 mean exploitation rates.

County	Lake	Acres	Angler exploitation	Angler expl. ≥14"	Angler expl. ≥20"	Tribal expl. ¹	Total adult exploitation
Bayfield	Middle Eau Claire	902	0.050	0.035	0.203	0.309	0.359
Forest	Metonga	2157	0.049	0.056	0.018	0.150	0.199
Iron	Trude	792	0.170	0.115	0.000	0.138	0.308
Iron	Turtle Flambeau Fl.	13122	0.070	0.087	0.175	0.089	0.159
Oconto	Bass	142	0.056	0.056	0.000	0.000	0.056
Oconto	Boot	230	0.025	0.025	0.080	0.000	0.025
Oneida	Big Carr	213	0.000	0.000	0.000	0.000	0.000
Sawyer	Lac Courte Oreilles	5039	0.039	0.042	0.000	0.057	0.096
Sawyer	Windigo	522	0.061	0.061	0.000	0.086	0.147
St. Croix	Cedar	1100	--	--	--	0.078	--
Vilas	Big Musky	930	0.240	0.322	0.777	0.151	0.390
Vilas	Big Portage	638	0.043	0.054	0.832	0.055	0.098
Vilas	Laura	599	0.007	0.020	0.000	0.044	0.051
Vilas	Lynx	339	0.000	0.000	0.000	0.090	0.090
Vilas	Squaw	785	0.112	0.000	0.000	0.097	0.210
Vilas	Trout	3816	0.071	0.080	0.000	0.070	0.141
2016 mean			0.066	0.064	0.139	0.088	0.155
1995-2015 mean			0.086	0.104	0.116	0.045	0.132

¹ Tribal harvest data used to calculate tribal exploitation provided by the Great Lakes Indian Fish and Wildlife Commission (Ngu 1995 and 1996, Krueger 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, Krueger and Brost 2010, White 2012).

Muskellunge Effort and Catch

Of the 16 lakes surveyed in 2016-17, 12 are classified as musky waters. Creel clerks recorded at least one musky caught from nine of the 12 classified musky lakes surveyed, and no musky caught from any unclassified waters; Appendix C. For the purpose of analyses and summarization of catch and effort, lakes not classified as musky waters and those without directed fishing effort were excluded even if limited numbers of musky had been reported in creel surveys.

In general, the “action classification” assigned to lakes (WDNR 1996) is a better predictor of musky catch and effort than recruitment source or lake size to describe variability in catch and effort (Simonson and Hewett 1999). In few instances (directed effort in Class A1 waters and catch/acre in Class A2 waters) did the 2016 creel estimates differ significantly from the prior 10 year averages for each lake classification (Analysis of variance, Proc GLM; Table 6).

Trends in directed effort and catch rates of muskellunge were evaluated since 1995; Trend evaluations were not done independently for each muskellunge ‘action class’ since limited or no data was available for some year/action class categories. There has been no observed trend in muskellunge catch rates [GLM; $F(1, 321) = 0.78$, $P = 0.38$] or directed fishing effort [$F(1, 326) = 2.78$, $P = 0.10$] in the Ceded Territory since 1995 (Figure 16).

Table 6. Comparison of muskellunge catch and effort rates in 2016 and average values from 2006-2015, by musky lake classification.

Class	Class Description	Lakes sampled	Angler catch/acre	Specific catch rate (fish/ hour)	Directed effort (hours/ acre)
2016					
A1	Trophy waters	7	0.07	0.02	2.20*
A2	Action waters	3	0.21*	0.04	4.99
B	Intermediate action/ size	1	0.00	0.00	0.97
C	Low importance	0	---	---	---
Total		11	0.07	0.02	2.61
2006-2015 Averages (Prior 10 years)					
A1	Trophy waters	43	0.16	0.02	4.69
A2	Action waters	68	0.55	0.04	11.15
B	Intermediate action/ size	20	0.21	0.03	4.74
C	Low importance	8	0.02	0.01	0.57
Total		139	0.32	0.03	7.51

* Difference between 2016 and prior 10 year average is statistically significant ($p < 0.05$).

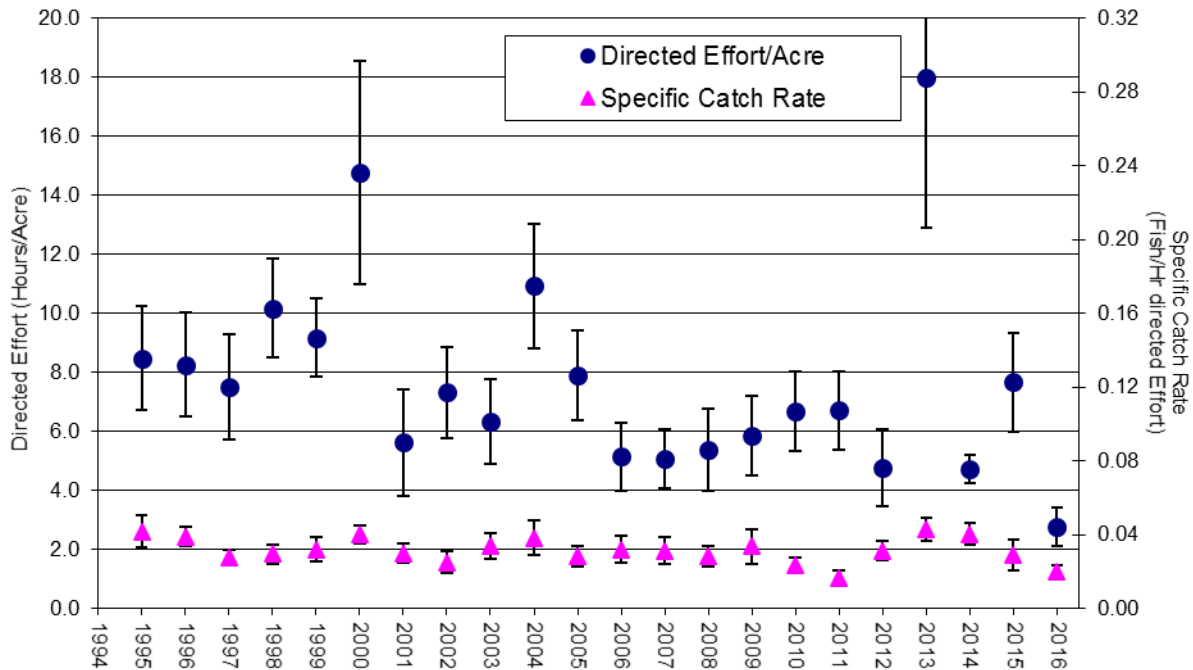


Figure 16. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for muskellunge in surveyed lakes in the Wisconsin Ceded Territory, 1995-2016.

Northern Pike Effort and Catch

Directed effort and catches of northern pike were recorded in each of 16 lakes surveyed in 2016-17 (Appendix C). Of the 16 lakes with northern pike effort and catch, four were smaller than 500 acres and twelve were 500 acres or larger (Table 7). There were no significant differences between large and small lakes with regard to directed angler effort, specific catch or harvest rate, or angler catch or harvest per acre of northern pike during the 2016-17 angling season (Table 7). In large lakes, significant differences were found between 2016-17 creel values and the corresponding prior 10 year averages (2006 -2015) for northern pike directed effort/acre and harvest/acre; for small lakes, no significant differences between current and prior 10 year averages were noted for any creel statistic evaluated (Table 7).

Estimates of angler effort directed toward northern pike have been highly variable across years (Figure 17), and since 1995 there has not been a statistically detectable trend in directed angler effort for northern pike [$F(1, 395) = 1.97, P = 0.16$]. Similarly, specific catch rates of northern pike show no significant trend since 1995 [$F(1, 395) = 1.39, P = 0.24$].

Table 7. Mean estimates calculated from 2016 and 2006-2015 northern pike creel survey data.

Year	Lake Size	N	Catch/ Acre	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/ Acre
2016*							
	< 500 acres	4	0.85	0.13	0.10	0.02	2.96
	> 500 acres	12	1.11	0.15	0.17	0.05	1.77
	All lakes	16	1.04	0.14	0.16	0.04	2.07
2006-2015							
	< 500 acres	84	2.43	0.35	0.26	0.04	4.70
	> 500 acres	100	1.96	0.29**	0.21	0.06	3.60**
	All lakes	184	2.18**	0.32**	0.23	0.05	4.10**

* Small lake values did not differ significantly from corresponding large lake values observed during the 2016-17 angling season for any variable shown (T-test, $p > 0.05$).

** 10 yr. averages differ significantly from corresponding 2016-17 annual values (T-test, $p < 0.05$).

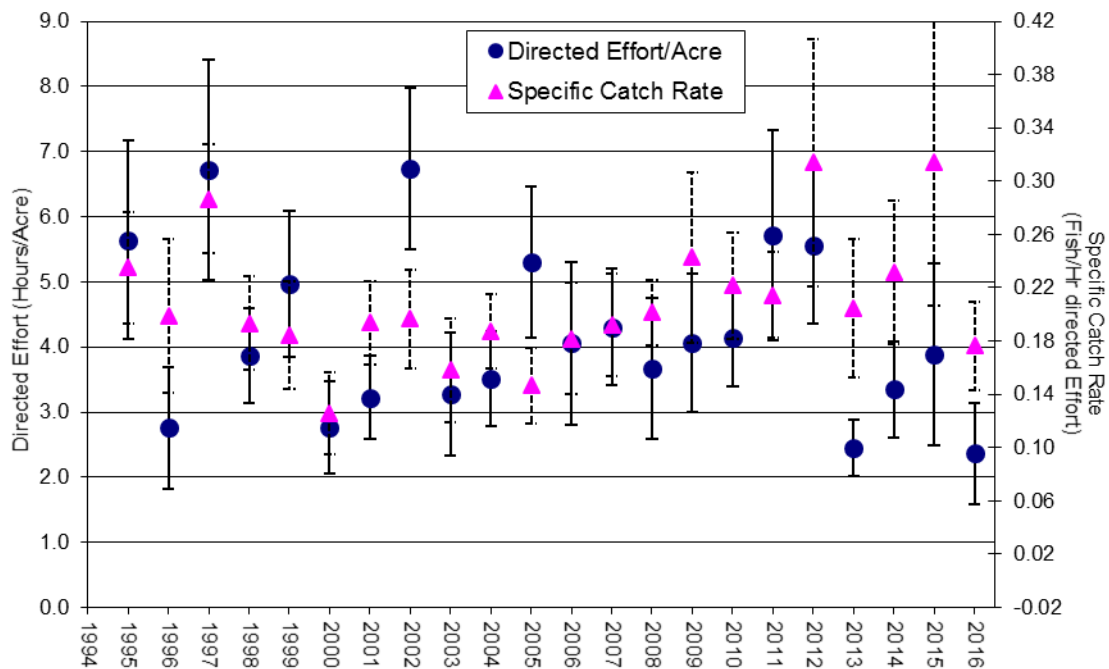


Figure 17. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for northern pike in surveyed lakes in the Wisconsin Ceded Territory, 1995-2016.

Largemouth Bass Effort and Catch

Directed angler effort toward, and/or catches of largemouth bass were reported in each of the 16 lakes surveyed in 2016-17 (Big Portage Lake, Vilas Co. had directed effort but no catch; Appendix C). Of surveyed lakes with largemouth bass catch, four were smaller than 500 acres and twelve were 500 acres or larger (Table 8). In 2016-17 there were no significant differences between large and small lakes with regard to angling effort directed toward largemouth bass, angler catch or harvest numbers or specific harvest rates (T-tests, $P > 0.05$) related to largemouth bass; Specific catch rates in small lakes were significantly greater than those in large lakes sampled (T-tests, equal variance, $P < 0.01$). In large lakes all creel statistics evaluated in 2016-17 differed from their respective prior 10 year averages; In small lakes only specific catch rate did so (T-tests, $P > 0.05$; Table 8).

Since 1995 there has been a statistically relevant increase in specific catch rates of largemouth bass [Slope = 0.014, $F(1, 371) = 14.53$, $P < 0.01$], but no significant change in directed effort expended fishing for them throughout the Wisconsin ceded territory ($P > 0.09$; Figure 18).

Table 8. Mean estimates calculated from 2016 and 2006-2015 largemouth bass creel survey data.

Year	Lake Size	N	Catch/ Acre	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/ Acre
2016							
Small	< 500 acres	4	6.44	0.20	0.59*	0.02	8.89
Large	> 500 acres	12	1.06	0.07	0.17*	0.01	1.67
	All lakes	16	2.40	0.10	0.26	0.01	3.47
2006-2015**							
Small	< 500 acres	82	4.89	0.30	0.44**	0.03	5.25
Large	> 500 acres	100	6.36**	0.35**	0.52**	0.04**	4.77**
	All lakes	182	5.69**	0.32**	0.48**	0.03**	4.98

* Small lake values differ significantly from corresponding large lake values observed during the 2016-17 angling season (T-test, $p > 0.05$).

** Significant differences exist between 10 yr. averages and corresponding 2016-17 annual values (T-test, $p \geq 0.05$).

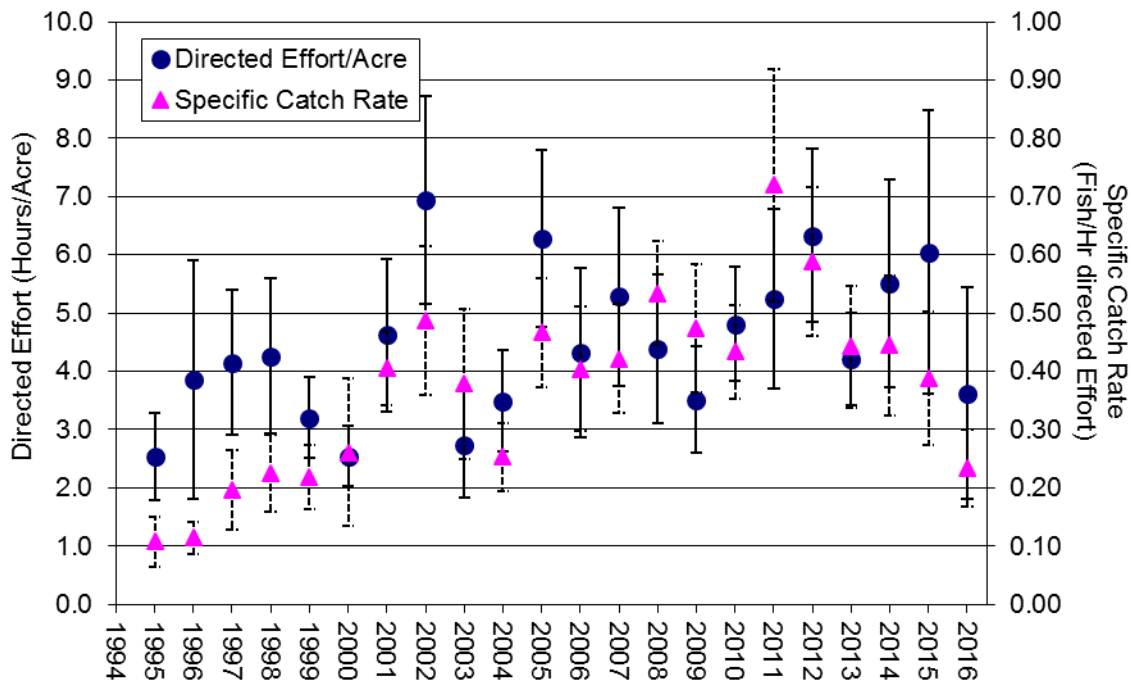


Figure 18. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for largemouth bass in surveyed lakes in the Wisconsin Ceded Territory, 1995-2016.

Smallmouth Bass Effort and Catch

Each of the 16 lakes surveyed in the 2016-17 angling season had some level of angler effort directed toward smallmouth bass, and catches of smallmouth bass were reported in 15 lakes surveyed (Appendix C). Bass Lake (Oconto Co.) had directed angler effort but no catch of smallmouth bass reported. Of the lakes with smallmouth bass catch in 2016-17, four were classified as 'small' (<500 ac.) and eleven as 'large' (\geq 500 ac.; Table 9). There were no significant differences in smallmouth bass directed angler effort, catch/acre, specific catch rate, harvest/acre, or specific harvest rate (T-test, $P > 0.05$) between large or small lakes in 2016-17 (Table 9). Similarly, there were no significant differences between creel statistics measured in 2016-17 and the corresponding 10 year average values with the exception of specific harvest rate in large lakes, which was significantly less in 2016-17 than the 10 year average (Table 9).

Both directed effort and specific catch rates of smallmouth bass anglers in the Ceded Territory have been variable over time, although the 2016-17 average of both variables fell within the observed range of values in other years since 1995 (Figure 19). Since 1995 when a randomized lake selection

process was instituted there have been no statistically detectable trends in directed angler effort/acre [$F(1, 383) = 0.03, P = 0.87$] or specific catch rates [$F(1, 383) = 3.58, P = 0.06$] over time (Figure 19).

Table 9. Mean estimates calculated from 2016 and 2006-2015 smallmouth bass creel survey data.

Year	Lake Size	N	Catch/ Acre	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/ Acre
2016*							
Small	< 500 acres	4	5.02	0.08	0.61	0.03	3.75
Large	> 500 acres	12	1.38	0.03	0.46	0.01	2.49
	All lakes	16	2.29	0.05	0.50	0.02	2.81
2006-2015							
Small	< 500 acres	80	1.45	0.03	0.33	0.01	2.64
Large	> 500 acres	99	1.94	0.07**	0.37	0.02	3.28
	All lakes	179	1.72	0.05	0.35	0.01	2.99

* No significant differences exist between large and small lakes for any parameter for the 2016-17 angling season (T-test, $p > 0.05$).

** Significant differences exist between 10 yr. averages and corresponding 2016-17 annual values (T-test, $p \geq 0.05$).

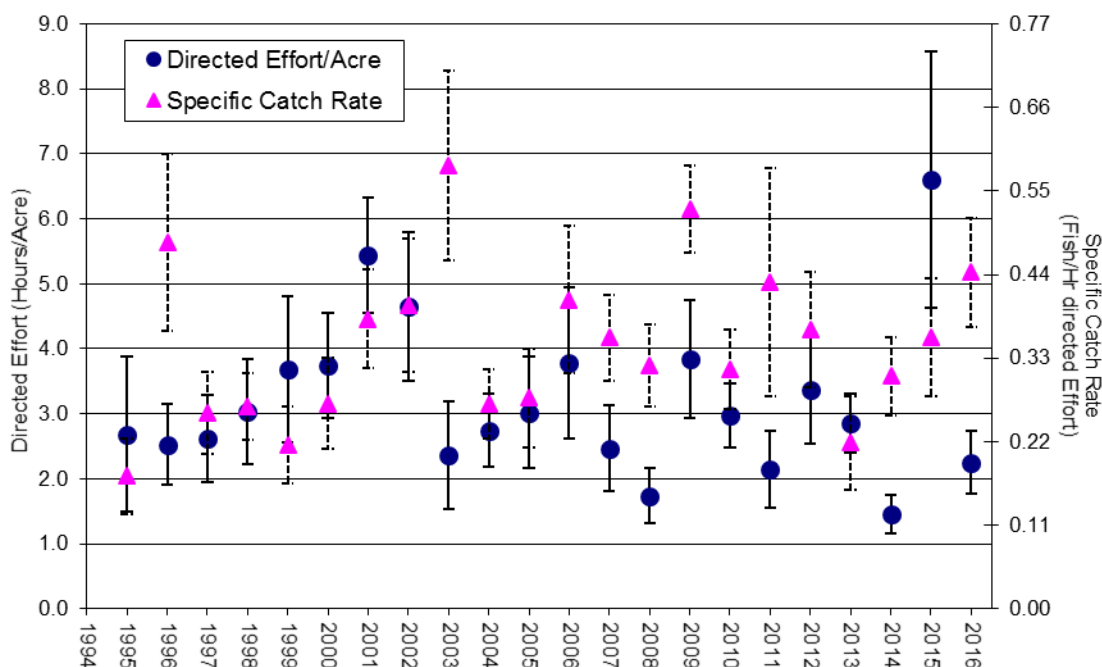


Figure 19. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for smallmouth bass in surveyed lakes in the Wisconsin Ceded Territory, 1995-2016.

Safe Harvest

Safe harvest calculated for the 2016 harvest season was 83,526 walleye and 4,207 musky across the entire Wisconsin Ceded Territory (Table 10). Safe harvest of both walleye and musky has been shown to be highly correlated to the surface acreage of water found in each county (Linear regression, $r^2 > 0.9$; Cichosz 2009). For both walleye and musky, the greatest total safe harvest numbers for individual counties were observed in Vilas (18,508 walleye, 1,181 musky), Oneida (16,216 walleye, 816 musky), Sawyer (9,451 walleye, 447 musky) and Iron (7,275 walleye, 301 musky) counties. When totaled, safe harvest from these four counties accounted for 62 percent of overall walleye and 65 percent of overall musky safe harvest for the Wisconsin Ceded Territory during 2016. Safe harvest numbers for individual lakes are listed in Appendix G.

Table 10. Walleye and musky safe harvest levels and ranks by county for the 2016 harvest season.

County	Lake Acreage*	Total Calculated Safe Harvest		Ranks (1 = Greatest #)	
		Walleye	Musky	Walleye	Musky
Ashland	2,862	411	157	20	7
Barron	13,684	1,467	45	12	16
Bayfield	12,665	3,056	122	8	9
Burnett	11,184	1,447	99	13	11
Chippewa	14,466	3,677	141	7	8
Clark	320	21	4	26	24
Douglas	6,211	1,434	40	14	17
Dunn	1,752	604		17	
Eau Claire	2,571	585	27	18	19
Florence	2,198	323		24	
Forest	11,278	2,227	46	10	15
Iron	24,651	7,275	301	4	4
Langlade	4,800	435	33	19	18
Lincoln	16,379	4,259	165	5	6
Marathon	9,653	1,903	49	11	14
Marinette	3,361	342	16	23	23
Oconto	3,125	373	20	22	20
Oneida	59,990	16,216	816	2	2
Polk	11,379	879	74	16	13
Portage	74	4		27	
Price	9,556	2,878	201	9	5
Rusk	5,633	1,373	106	15	10
Sawyer	48,044	9,451	447	3	3
St. Croix	1,100	387	17	21	22
Taylor	4,132	178	20	25	20
Vilas	71,168	18,508	1,181	1	1
Washburn	14,594	3,813	80	6	12
Grand Total	366,830	83,526	4,207	---	---

* Sum of acreage for lakes with defined safe harvest of one or both species; does not include total county-wide lake acreage.

Walleye Young-of-Year Surveys

Young of the year (YOY) surveys provide an index of the abundance and survival of the current year class of walleyes from hatching or stocking to their first fall. These surveys provide fisheries managers with potential insight into future changes in adult populations. Early indication of these potential changes allows fisheries managers to develop management strategies to accommodate expected changes in adult populations. Although YOY relative abundance gives some indication of possible future adult abundance it does not necessarily correspond directly, as survival to adulthood varies (Hansen et al. 1998).

During 2016 WDNR completed 217 fall surveys on 190 different lakes in the Wisconsin Ceded Territory (Appendix E. YOY Walleye Survey Summaries.). Of the lakes sampled, 76 had walleye populations classified as sustained by natural reproduction (recruitment codes NR, C-NR, or C-), 82 as sustained by stocking (ST or C-ST), and 26 as remnant or newly established populations (REM, O-ST, NR-2; Appendix B). Six lakes surveyed were classified as having no known walleye population (NONE/0). Water temperatures during 2016 YOY walleye surveys ranged from 48 - 76° F; mean and median water temperatures during YOY surveys were both 62° F. Young-of-year walleye lengths ranged from 3.2 to 10.0 inches across all lakes and dates surveyed in 2016 (Appendix E. YOY Walleye Survey Summaries.).

Differences in mean YOY walleye density between natural and stocked recruitment categories was significant during 2016 (t-test-unequal variance, $t = 5.79$, $df = 88$, $P < 0.01$). Consistent with all previous years since 1990, lakes sustained primarily by natural reproduction had higher mean walleye YOY density (mean = 19.3/mile of shoreline stocked, range = 0.0–159.4) than lakes sustained by stocking (mean = 1.1/mile, range = 0.0–32.7) during 2016 (Figure 20). The mean YOY walleye abundance observed in natural recruitment lakes during 2016 (19.3/mile) was statistically dissimilar (t-test unequal variance, $P < 0.01$) to the average across the previous 26 years studied (28.6/mile from 1990-2015). The mean YOY walleye abundance observed in stocked lakes during 2016 (1.1/mile) was statistically less than that observed over the previous 26 years studied (5.0/mile from 1990-2015; t-test unequal variance, $t = -5.8$, $df = 302$, $P < 0.01$; Figure 20).

It appears that within the Wisconsin Ceded Territory there may be region-wide annual effects on

walleye recruitment since mean recruitment varies dramatically from year to year when data from all lakes are combined (Figure 20); In the absence of an annual regional effect one might expect average annual recruitment values (as YOY/mile) for the entire region to be similar across years. Lack of recruitment in a given lake for one or more years is natural and not necessarily alarming. Sporadic recruitment is common for walleye populations both within and among individual lakes. It is common to have almost complete lack of recruitment in 25% or more of lakes with natural reproduction, and year class failures are even more common in lakes with populations maintained by stocking. Generally, successful recruitment occurs in a given lake every 3-4 years which may reduce competition between year classes of walleye (Li et al. 1996).

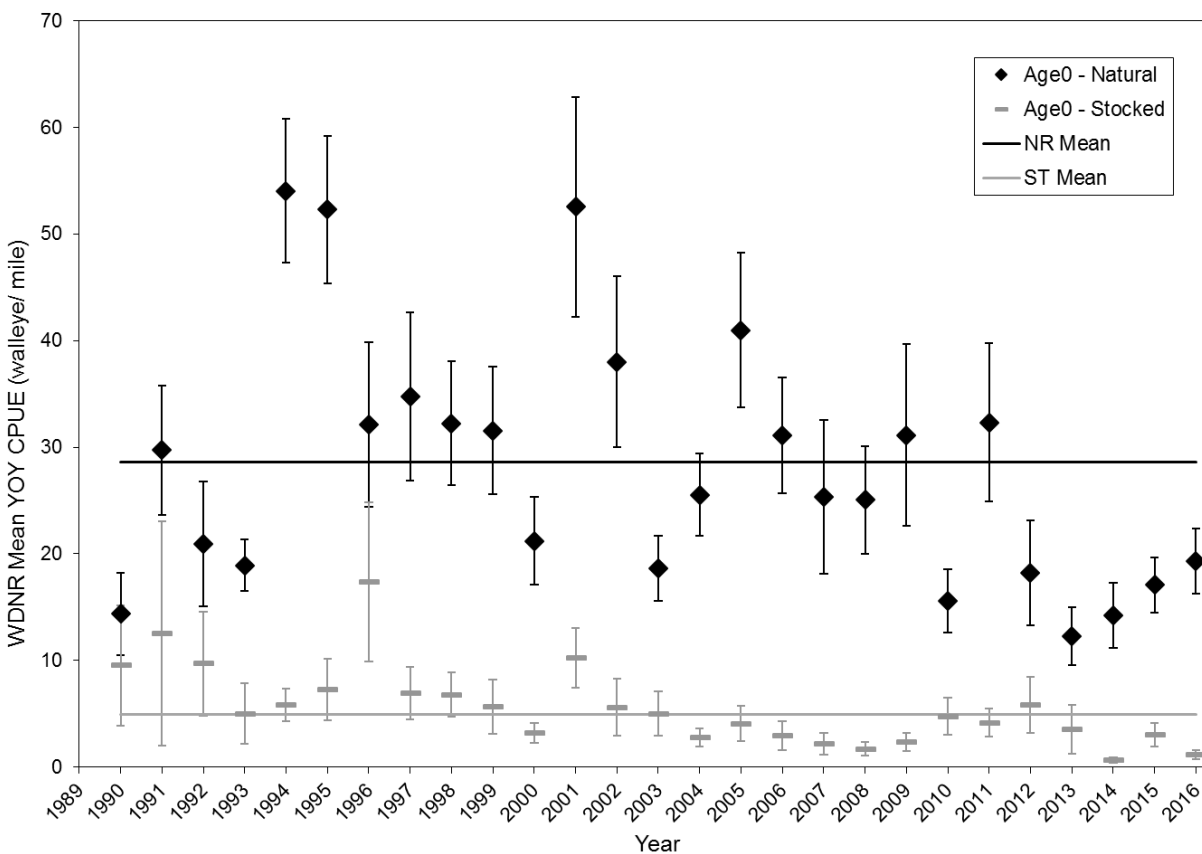


Figure 20. Comparison of mean YOY walleye density (\pm SE) observed in fall electrofishing surveys since 1990 in lakes dominated by natural recruitment or stocking.

A general linear model used to assess the impact of year and/or recruitment model on YOY walleye density was significant ($p < 0.0001$; Table 11). The significance of the model was driven by differences in YOY density between recruitment models (natural or stocked; $p < 0.0001$), years ($p < 0.0001$), and the interaction of year*recruitment model ($p = 0.0001$). Based on the significance of the year*recruitment model interaction term, regressions were done to evaluate trends independently for natural and stocked model lakes. YOY walleye densities have declined significantly over time in both natural (slope=-0.80, $p < 0.001$) and stocked (slope=-0.31, $p < 0.001$) model lakes since 1990 (Figure 20).

Table 11. GLM results comparing YOY walleye density across years and primary walleye recruitment source.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	53	559926	10564	9.59	<.0001
Error	2,481	2732889	1101		
		Type III SS	Mean Square	F Value	Pr > F
Year	26	110447	4248	3.86	<.0001
Recruitment Model^a	1	252386	252386	229.12	<.0001
Year x Recruitment Model	26	67025	2578	2.34	0.0001

a –Recruitment Models compared are 'natural' and 'stocked'.

The percentages of natural-model lakes with greater than 25 YOY walleye per mile and greater than 100 YOY walleye per mile are also used to indicate strong annual year classes in the Wisconsin Ceded Territory. These values are less affected by large values for individual lakes than the mean number of YOY walleye caught per mile. In 2016, 22/87 natural model lakes (25%) had YOY indices > 25 per mile, and 2 NR lakes (2%) had YOY walleye indices > 100 per mile (Appendix E. YOY Walleye Survey Summaries.). Overall, the proportion of lakes with YOY catch rates greater than 25 or 100 fish per mile in 2016 was less than the mean proportion of lakes observed with the same catch rates between 1990-2015 (mean percentage > 25 YOY/mi = 34%; 100 >100/mi = 7%). These finding suggest a below average naturally produced walleye year class across the ceded territory in 2016 despite localized conditions that allowed for large year classes to be found in a limited number of waters.

In lakes categorized as being sustained primarily by stocking, differences in the mean number of YOY walleye captured per mile in lakes that were stocked (17.1 YOY/ mile) with fry or small or large

fingerlings was not significantly different (t-test unequal variance, $t = -2.07$, $df = 2.0$, $P = 0.17$) from those that were not stocked (0.5 YOY/ mile) in 2016 (Table 12). Despite the non-significant finding, the mean number of YOY/mile observed in stocked waters was notably higher than that in un-stocked waters. Such differences are commonly observed and most often statistically significant; In 2015 and 2016, the lack of statistical significance was unusual and largely driven by low sample size in stocked waters and the inequality of variances between stocked and non-stocked waters.

Table 12. Young-of-the-year indices in lakes categorized as being sustained primarily by stocking (ST or C-ST), separated by whether or not the lake was stocked in 2016.

	Stocked in 2016	Not Stocked in 2016
No. Lakes	3	78
Mean YOY walleye/ mile	17.08	0.53
Q1/Median/Q3	6.3 / 12.3 / 32.7	0.0 / 0.0 / 0.3
Lakes with 0 YOY/ mile	0 (0%)	55 (71%)
Lakes with ≤ 5 YOY/ mile	0 (0%)	75 (96%)
Lakes with ≤ 10 YOY/ mile	1 (33%)	77 (99%)

Fall surveys were conducted on nine lakes previously stocked with oxytetracycline (OTC) marked walleyes in 2016 (Table 13). Unlike most years, the percent of marked fish showed no clear relationship with recruitment code during 2016, although all lakes sampled are known to have a combination of natural and hatchery fish contributing to the fishery (Codes C-ST and C-NR). Results of OTC sampling are not considered for recruitment code designation unless a minimum of 30 individual fish are sampled from the water body in question, and are not the sole factor used to define recruitment codes.

Table 13. Lakes stocked with oxytetracycline (OTC) marked fish sampled in 2016, number of sampled fish where OTC marks were noted on the otolith, and percent contribution of stocked fish to the total sample.

County	Lake	Recruit Code*	WBIC	With OTC	Without OTC	Total	% Contrib.
Vilas	Allequash L	C-ST	2332400	46	4	50	8
Vilas	Big St Germain L	C-NR	1591100	35	15	50	30
Vilas	Fishtrap L	C-NR	2343200	3	8	11	73
Vilas	Kentuck L	C-NR	716800	37	0	37	0
Vilas	Little Arbor Vitae L	C-ST	1545300	35	5	40	13
Oneida	Sevenmile L	C-ST	1605800	35	0	35	0
Oneida	Two Sisters L	C-NR	1588200	22	6	28	21
Vilas	High L	C-NR	2344000	10	0	10	0
Vilas	Hunter L	C-ST	991700	19	3	22	14

* Recruitment code C-ST is in the stocked model, C-NR is in the natural model (Appendix B).

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APPENDICES

Appendix A. WDNR Lake Sampling Rotation 2013-2016.

YEAR	TREATY UNIT	MWBC	COUNTY	LAKE	AREA	CURRENT MODEL	# LAKES	ROTATION
2013	Spooner	2678100	BURNETT	LIPSETT	393	S	1	TREND
2013	Spooner	2742100	BAYFIELD	MIDDLE EAU CLAIRE	902	N	1	TREND
2013	Spooner	2496300	Washburn	Shell	2,580	N	1	Spatial
2013	Spooner	1764500	Taylor	Sackett	63	S	1	Spatial
2013	Spooner	2461100	Burnett	Devils	1,001	S	1	Spatial
2013	Spooner	2133200	Eau Claire	L Eau Claire	860	N	1	Spatial
2013	Spooner		Sawyer	Connors/L of the Pines	702	N	2	Spatial
2013	Spooner	2469800	Barron	Horseshoe	115	S	1	Spatial
2013	Spooner	1875900	Rusk	Pulaski	126	N	1	Spatial
TOTAL	Spooner				6,742		10	
2013	Woodruff	394400	FOREST	L METONGA	1,991	S	1	TREND
2013	Woodruff	2331600	VILAS	TROUT	3,816	S	1	TREND
2013	Woodruff	Multiple	Vilas	Eagle Chain	4,174	N	10	Spatial
2013	Woodruff	1586600	Oneida	Spider	118	N	1	Spatial
TOTAL	Woodruff				10,281		14	
2013	TOTAL				17,023		24	
2014	Spooner	2949200	IRON	PINE	312	N	1	TREND
2014	Spooner	2620600	POLK	BALSAM	2,054	S	1	TREND
2014	Spooner	2710800	Washburn	Matthews	263	S	1	Spatial
2014	Spooner	2157000	CHIPPEWA	OTTER LAKE	602	S	1	Spatial
2014	Spooner	1864000	Barron	Lower Devils	162	N	1	Spatial
2014	Spooner	2725500	Sawyer	Hayward	247	S	1	Spatial
2014	Spooner	2470000	Washburn	Horseshoe	194	S	1	Spatial
2014	Spooner	2694000	Douglas	Whitefish	832	N	1	Spatial
TOTAL	Spooner				4,124		9	
2014	Woodruff	1588200	ONEIDA	TWO SISTERS	719	N	1	TREND
2014	Woodruff	1545600	VILAS	BIG ARBOR VITAE	1,090	N	1	TREND
2014	Woodruff	Multiple	Oneida	Three Lakes Chain	6,024	N	16	Spatial
2014	Woodruff	1613500	Oneida	Whitefish	205	R	1	Spatial
2014	Woodruff	1543300	Oneida	Squirrel	590	N	1	Spatial
TOTAL	Woodruff				8,883		21	
2014	TOTAL				13,007		30	

YEAR	TREATY UNIT	MWBC	COUNTY	LAKE	AREA	CURRENT MODEL	# LAKES	ROTATION
2015	Spooner	2897100	BAYFIELD	DIAMOND	341	S	1	TREND
2015	Spooner	2391200	SAWYER	GRINDSTONE	3,111	N	1	TREND
2015	Spooner	2882300	Bayfield	Siskiwit	330	N	1	GLIFWC PE/ DNR Creel
2015	Spooner	1469100	Taylor	Rib Lake	301	N	1	Spatial
2015	Spooner	2393500	Sawyer	Sissabagama	805	N	1	Spatial
2015	Spooner	2303500	Iron	Long	370	S	1	Spatial
2015	Spooner	2423000	Sawyer	Ghost	385	S	1	Spatial/ no creel
2015	Spooner	2942300	Washburn	Long	3,384	N	1	Spatial
TOTAL	Spooner				9,027		8	
2015	Woodruff	1592400	Vilas	PLUM	1057	N	1	TREND
2015	Woodruff	1018500	Vilas	SNIPPE	216	N	1	TREND
2015	Woodruff	716800	Vilas/Forest	Kentuck	1,001	N	1	GLIFWC PE/ DNR Creel
2015	Woodruff	1596300	Vilas	Little St. Germain	972	S	1	Spatial
2015	Woodruff	1586600	Oneida	Spider	123	N	1	Spatial/ no creel
2015	Woodruff	973000	Oneida	Bolger	115	S	1	Spatial
2015	Woodruff	494200	Langlade	Rose	115	N	1	Spatial
2015	Woodruff	1523600	Oneida	Bearskin	403	N	1	Spatial
2015	Woodruff		Oneida	Tomahawk/Minocqua Chain	5,805	S	5	Special/ no creel
2015	Woodruff	1618100	Oneida	Thunder	1,794	S	1	Spatial
TOTAL	Woodruff				11,601		14	
2015	TOTAL				20,628		30	
2016	Spooner	2678100	BURNETT	LIPSETT	393	R	1	TREND
2016	Spooner	2742100	BAYFIELD	MIDDLE EAU CLAIRE/BONY	902	N	1	TREND- BWREF
2016	Spooner	2918600	Ashland	Spider Lake (Moquah)	86	S	1	Spatial/ no creel
2016	Spooner	2294900	Iron	Turtle Flambeau Fl.	13545	N	1	Spatial
2016	Spooner	2390800	Sawyer	Lac Courte Oreilles	5,432	N	1	Spatial
2016	Spooner	2046600	Sawyer	Windigo	503	N	1	BW-REF
TOTAL	Spooner				20,861		6	
2016	Woodruff	394400	FOREST	L METONGA	1,991	S	1	TREND
2016	Woodruff	2331600	VILAS	TROUT	3,816	S	1	TREND
2016	Woodruff	2271600	Oneida/ Vilas	Squaw	785	N	1	GLIFWC PE/ DNR Creel
2016	Woodruff	995200	Vilas	Laura	628	N	1	Spatial
2016	Woodruff	2954500	VILAS	LYNX LAKE T43N R07E S18	339	N	1	Spatial
2016	Woodruff	418700	Oconto	Boot	230	N	1	Spatial
2016	Woodruff	1629500	VILAS	Big Portage	586	N	1	Spatial
2016	Woodruff	376900	FOREST	Lily	217	N	1	Spatial
2016	Woodruff	971600	Oneida	Big Carr	209	N	1	Spatial
2016	Woodruff	1835300	Vilas	Big Muskellunge	897	N	1	Spatial
TOTAL	Woodruff				9,698		10	
2016	TOTAL				30,559		30	

Appendix B. Walleye Recruitment Code Descriptions (primary source of walleye recruitment; U.S. Department of the Interior, 1991).

Recruitment Code ¹	Recruitment Model ²	Description
blank	None	unknown
NONE/ O	None	No walleye are present
REM	Remnant	Stocking provides the only source of recruitment but was discontinued. The stock is expected to disappear at some time in the future.
0-ST	Remnant	Stocking provides the only source of recruitment but was initiated only recently and has not yet resulted in a harvestable population of adults.
ST	Stocked	Stocking provides the only source of recruitment and is consistent enough to result in a multi-year class adult population.
C-ST	Stocked	Stocking provides the primary source of recruitment but some natural reproduction occurs and may augment the adult population.
C-	Natural	Natural reproduction and stocking provide more or less equal recruitment to the adult population.
C-NR	Natural	Natural reproduction is adequate to sustain the population even though the lake is being stocked.
NR	Natural	Natural reproduction only; consistent enough to result in multi-year class adult populations.
NR-2	Remnant	Natural reproduction only; inconsistent, results in missing year classes.

1 - Recruitment Code = Designation of the *primary* recruitment source and done by a technical working group.

2 - Recruitment Model is used for data analysis and groups various recruitment codes into one of three categories.

Appendix C. 2016-2017 Creel Survey Summaries.

Angler Effort Summary

County	Lake	MWBIC	Acres	Walleye recruit code	Musky recruit code	Total angler effort	Total angler effort/ acre	Directed Effort Walleye	Walleye Effort/ Acre	Directed Effort Musky	Musky Effort/ Acre	Directed Effort Pike	Pike Effort/ Acre	Directed Effort LMB	LMB Effort/ Acre	Directed Effort SMB	SMB Effort/ Acre
Bayfield	Middle Eau Claire	2742100	902	C-NR	C-	16,266	18.03	3,731	4.14	2,360	2.62	3,334	3.70	2,936	3.25	1,976	2.19
Forest	Metonga	394400	2,157	C-NR	O	41,924	19.44	10,388	4.82	--	--	2,504	1.16	406	0.19	5,297	2.46
Iron	Trude	2295200	781	NR	C-ST	11,663	14.73	4,208	5.39	3,682	4.71	423	0.54	301	0.39	1,833	2.35
Iron	Turtle Flambeau Flowage	2294900	13,545	NR	C-ST	190,326	14.50	116,182	8.58	22,966	1.70	17,086	1.26	4,472	0.33	31,178	2.30
Oconto	Bass	417900	142	C-ST	O	1,783	12.56	600	4.23	--	--	95	0.67	807	5.68	26	0.18
Oconto	Boot	418700	230	C-NR	NR	16,696	72.59	1,727	7.51	--	--	2,555	11.11	5,763	25.06	327	1.42
Oneida	Big Carr	971600	213	ST	NR	3,504	16.45	564	2.65	206	0.97	14	0.07	1,028	4.83	1,937	9.09
Sawyer	Lac Courte Oreilles	2390800	5,039	C-NR	ST	50,172	9.96	17,470	3.47	4,873	0.97	12,701	2.52	7,297	1.45	10,001	1.98
Sawyer	Windigo	2046600	522	C-NR	O	10,022	19.20	2,087	4.00	--	--	2,033	3.89	5,384	10.31	4,019	7.70
St. Croix	Cedar	2615100	1,100	NR	ST	31,958	29.05	8,116	7.38	4,318	3.93	4,988	4.53	3,516	3.20	3,664	3.33
Vilas	Big Musky	1835300	930	NR	C-	15,104	16.24	10,197	10.96	1,047	1.13	1,888	2.03	236	0.25	2,001	2.15
Vilas	Big Portage	1629500	638	NR	O	8,143	12.76	6,010	9.42	18	0.03	628	0.98	75	0.12	1,397	2.19
Vilas	Laura	995200	599	NR	ST	5,819	9.72	1,664	2.78	2,882	4.81	11	0.02	66	0.11	1,353	2.26
Vilas	Lynx	2954500	339	NR	C-ST	3,119	9.20	1,442	4.25	909	2.68	0	0.00	0	0.00	1,460	4.31
Vilas	Squaw	2271600	785	NR	C-	13,053	16.63	3,786	4.82	5,883	7.49	458	0.58	269	0.34	404	0.51
Vilas	Trout	2331600	3,816	C-ST	C-NR	19,258	5.05	10,543	2.76	1,273	0.33	184	0.05	164	0.04	1,866	0.49

Walleye

County	Lake	MWBIC	Acres	WAE Recruit Code	Initial WAE Bag	Final WAE Bag	WAE Size Reg.	Adult PE	APEAc	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific catch rate	Specific harvest rate	No. fish measured	Mean length	General catch rate	General harvest rate
Bayfield	Middle Eau Claire	2742100	902	C-NR	3	3	14-18 slot	852	0.94	555	0.62	126	0.14	0.14	0.03	31	18.0	0.03	0.01
Forest	Metonga	394400	2,157	C-NR	3	3	20-24 Slot	5,770	2.68	2,284	1.06	678	0.31	0.20	0.06	162	18.3	0.05	0.02
Iron	Trude	2295200	781	NR	3	3	none	1,818	2.33	781	1.00	484	0.62	0.19	0.11	30	12.4	0.08	0.05
Iron	Turtle Flambeau F	2294900	13,545	NR	3	3	none	36,855	2.72	30,580	2.26	14,266	1.05	0.25	0.12	690	13.9	0.16	0.08
Oconto	Bass	417900	142	C-ST	3	3	18	212	1.49	111	0.78	13	0.09	0.18	0.02	2	20.8	0.07	0.01
Oconto	Boot	418700	230	C-NR	3	3	18	248	1.08	102	0.44	20	0.09	0.04	0.00	7	20.0	0.01	0.00
Oneida	Big Carr	971600	213	ST	3	3	20-24 Slot	61	0.29	4	0.02	0	0.00	0.01	0.00	0	--	0.00	0.00
Sawyer	Lac Courte Oreilles	2390800	5,039	C-NR	3	3	20-24 Slot	7,230	1.43	2,035	0.40	934	0.19	0.11	0.05	96	18.3	0.04	0.02
Sawyer	Windigo	2046600	522	C-NR	3	3	1>14	1,063	2.04	283	0.54	166	0.32	0.12	0.07	23	19.7	0.03	0.02
St. Croix	Cedar	2615100	1,100	NR	3	3	14-18 slot	3,485	3.17	2,386	2.17	295	0.27	0.28	0.03	56	15.0	0.08	0.01
Vilas	Big Musky	1835300	930	NR	3	3	1>14	3,634	3.9075269	4,563	4.91	2,283	2.45	0.44	0.22	380	14.2	0.30	0.15
Vilas	Big Portage	1629500	638	NR	3	3	14-18 slot	3,244	5.08	1,761	2.76	399	0.63	0.28	0.07	142	15.3	0.22	0.05
Vilas	Laura	995200	599	NR	3	3	1>14	2,728	4.5542571	125	0.21	89	0.15	0.07	0.05	35	15.0	0.02	0.02
Vilas	Lynx	2954500	339	NR	3	3	20-24 Slot	468	1.38	73	0.22	0	0.00	0.05	0.00	0	--	0.02	0.00
Vilas	Squaw	2271600	785	NR	3	3	1>14	1,779	2.27	922	1.17	524	0.67	0.22	0.12	93	13.2	0.07	0.04
Vilas	Trout	2331600	3,816	C-ST	3	3	20-24 Slot	6,127	1.61	2,083	0.55	902	0.24	0.20	0.08	167	17.9	0.11	0.05

Musky

County	Lake	MWBIC	Acres	MRC	Musky Class	Musky size limit	Angler catch	Angler catch/ acre	Angler harvest	Angler harvest/ acre	Specific catch rate	Specific harvest rate	No. fish measured	Mean length	General catch rate	General harvest rate
Bayfield	Middle Eau Claire	2742100	902	C-	A1	40	46	0.05	0	0.00	0.0113	0.0000	0	--	0.0000	0.0000
Forest	Metonga	394400	2157	O		40	0	0.00	0	0.00	--	--	--	--	--	--
Iron	Trude	2295200	781	C-ST	A1	40	96	0.12	0	0.00	0.0261	0.0000	0	--	0.0100	0.0000
Iron	Turtle Flambeau F	2294900	13545	C-ST	A1	40	1067	0.08	0	0.00	0.0297	0.0000	0	--	0.0100	0.0000
Oconto	Bass	417900	142	O		40	0	0.00	0	0.00	--	--	--	--	--	--
Oconto	Boot	418700	230	NR	C	40	0	0.00	0	0.00	--	--	--	--	--	--
Oneida	Big Carr	971600	213	NR	B	40	0	0.00	0	0.00	0.0000	0.0000	0	--	0.0000	0.0000
Sawyer	Lac Courte Oreilles	2390800	5039	ST	A1	50	148	0.03	0	0.00	0.0201	0.0000	0	--	0.0000	0.0000
Sawyer	Windigo	2046600	522	O		40	0	0.00	0	0.00	--	--	--	--	--	--
St. Croix	Cedar	2615100	1100	ST	A1	40	244	0.22	0	0.00	0.0307	0.0000	0	--	0.0100	0.0000
Vilas	Big Musky	1835300	930	C-	A1	40	18	0.02	0	0.00	0.0170	0.0000	0	--	0.0000	0.0000
Vilas	Big Portage	1629500	638	O		40	0	0.00	0	0.00	--	--	--	--	--	--
Vilas	Laura	995200	599	ST	A2	40	142	0.24	0	0.00	0.0392	0.0000	0	--	0.0300	0.0000
Vilas	Lynx	2954500	339	C-ST	A2	40	55	0.16	0	0.00	0.0481	0.0000	0	--	0.0200	0.0000
Vilas	Squaw	2271600	785	C-	A2	28	177	0.23	0	0.00	0.0237	0.0000	0	--	0.0100	0.0000
Vilas	Trout	2331600	3816	C-NR	A1	45	0	0.00	0	0.00	0.0000	0.0000	0	--	0.0000	0.0000

Northern Pike

County	Lake	MWBIC	Acres	Angler catch	Angler catch/ acre	Angler harvest	Angler harvest/ acre	Specific catch rate	Specific harvest rate	No. fish measured	Mean length	General catch rate	General harvest rate
Bayfield	Middle Eau Claire	2742100	902	2,897	3.21	298	0.33	0.35	0.08	69	23.7	0.18	0.02
Forest	Metonga	394400	2,157	844	0.39	226	0.10	0.12	0.04	63	26.6	0.02	0.01
Iron	Trude	2295200	781	535	0.69	11	0.01	0.07	0.00	1	23.5	0.07	0.00
Iron	Turtle Flambeau F	2294900	13,545	14,799	1.09	1,900	0.14	0.32	0.05	83	20.3	0.08	0.01
Oconto	Bass	417900	142	7	0.05	0	0.00	--	--	0	--	0.02	0.00
Oconto	Boot	418700	230	756	3.29	114	0.50	0.21	0.04	55	20.5	0.05	0.01
Oneida	Big Carr	971600	213	0	0.00	0	0.00	0.00	0.00	0	--	0.00	0.00
Sawyer	Lac Courte Oreilles	2390800	5,039	5,394	1.07	1,346	0.27	0.27	0.09	191	23.5	0.11	0.03
Sawyer	Windigo	2046600	522	2,078	3.98	167	0.32	0.40	0.06	14	23.1	0.21	0.02
St. Croix	Cedar	2615100	1,100	959	0.87	89	0.08	0.06	0.01	16	24.0	0.03	0.00
Vilas	Big Musky	1835300	930	874	0.94	256	0.28	0.11	0.06	47	23.3	0.06	0.02
Vilas	Big Portage	1629500	638	559	0.88	161	0.25	0.16	0.07	55	21.3	0.07	0.02
Vilas	Laura	995200	599	10	0.02	0	0.00	0.00	0.00	0	--	0.01	0.00
Vilas	Lynx	2954500	339	14	0.04	0	0.00	--	--	0	--	0.05	0.00
Vilas	Squaw	2271600	785	123	0.16	0	0.00	0.08	0.00	0	--	0.01	0.00
Vilas	Trout	2331600	3,816	83	0.02	19	0.00	0.12	0.08	4	25.8	0.01	0.00

Smallmouth Bass

County	Lake	MWBIC	Acres	Angler catch	Angler catch/ acre	Angler harvest	Angler harvest/ acre	Specific catch rate	Specific harvest rate	No. fish measured	Mean length	General catch rate	General harvest rate
Bayfield	Middle Eau Claire	2742100	902	1,226	1.36	97	0.11	0.53	0.04	2	15.95	0.09	0.01
Forest	Metonga	394400	2,157	6,270	2.91	57	0.03	0.67	0.00	13	17.88	0.21	0.00
Iron	Trude	2295200	781	587	0.75	0	0.00	0.27	0.00	0	--	0.09	0.00
Iron	Turtle Flambeau F	2294900	13,545	23,460	1.73	832	0.06	0.47	0.02	36	13.48	0.13	0.00
Oconto	Bass	417900	142	0	0.00	0	0.00	0.00	0.00	0	--	0.00	0.00
Oconto	Boot	418700	230	225	0.98	36	0.16	0.63	0.11	0	--	0.02	0.00
Oneida	Big Carr	971600	213	3,676	17.26	34	0.16	1.45	0.01	10	12.90	1.05	0.01
Sawyer	Lac Courte Oreilles	2390800	5,039	5,963	1.18	70	0.01	0.51	0.01	11	17.90	0.15	0.00
Sawyer	Windigo	2046600	522	488	0.93	11	0.02	0.10	0.00	2	15.40	0.06	0.00
St. Croix	Cedar	2615100	1,100	1,852	1.68	17	0.02	0.33	0.00	3	15.73	0.08	0.00
Vilas	Big Musky	1835300	930	1,510	1.62	12	0.01	0.70	0.00	2	20.55	0.15	0.00
Vilas	Big Portage	1629500	638	1,665	2.61	12	0.02	0.97	0.01	4	19.28	0.27	0.00
Vilas	Laura	995200	599	829	1.38	56	0.09	0.55	0.03	19	16.03	0.19	0.01
Vilas	Lynx	2954500	339	618	1.82	5	0.01	0.36	0.00	1	17.20	0.21	0.00
Vilas	Squaw	2271600	785	139	0.18	13	0.02	0.09	0.01	2	14.25	0.01	0.00
Vilas	Trout	2331600	3,816	874	0.23	8	0.00	0.39	0.00	2	18.50	0.05	0.00

Largemouth Bass

County	Lake	MWBIC	Acres	Angler catch	Angler catch/ acre	Angler harvest	Angler harvest/ acre	Specific catch rate	Specific harvest rate	No. fish measured	Mean length	General catch rate	General harvest rate
Bayfield	Middle Eau Claire	2742100	902	2,428	2.69	117	0.13	0.45	0.02	22	14.96	0.16	0.01
Forest	Metonga	394400	2,157	300	0.14	4	0.00	0.11	0.00	1	16.40	0.02	0.00
Iron	Trude	2295200	781	24	0.03	0	0.00	0.08	0.00	0	--	0.01	0.00
Iron	Turtle Flambeau F	2294900	13,545	720	0.05	14	0.00	0.04	0.00	1	16.10	0.00	0.00
Oconto	Bass	417900	142	427	3.01	17	0.12	0.53	0.02	3	14.90	0.32	0.01
Oconto	Boot	418700	230	4,446	19.33	135	0.59	0.66	0.02	24	14.94	0.28	0.01
Oneida	Big Carr	971600	213	703	3.30	15	0.07	0.58	0.01	4	13.50	0.02	0.00
Sawyer	Lac Courte Oreilles	2390800	5,039	3,579	0.71	434	0.09	0.39	0.04	44	15.06	0.07	0.01
Sawyer	Windigo	2046600	522	3,621	6.94	289	0.55	0.60	0.04	32	15.76	0.44	0.04
St. Croix	Cedar	2615100	1,100	2,231	2.03	8	0.01	0.30	0.00	1	16.80	0.08	0.00
Vilas	Big Musky	1835300	930	28	0.03	0	0.00	0.07	0.00	0	--	0.01	0.00
Vilas	Big Portage	1629500	638	0	0.00	0	0.00	0.00	0.00	0	--	0.00	0.00
Vilas	Laura	995200	599	15	0.03	3	0.01	0.02	0.00	1	15.00	0.00	0.00
Vilas	Lynx	2954500	339	36	0.11	0	0.00	--	--	0	--	0.05	0.00
Vilas	Squaw	2271600	785	11	0.01	0	0.00	0.02	0.00	0	--	0.00	0.00
Vilas	Trout	2331600	3,816	64	0.02	0	0.00	0.01	0.00	0	--	0.01	0.00

Appendix D. WDNR Walleye Population Estimates Accepted For Use by the Treaty TWG in 2016.

MWBC	County	Lake	Acres	Angler Reg	Recruit Code	Adult PE	CV Adult PE	L95 C.I. Adults	Adult PE/Acre	Adult 0-12"	Adult 12-15"	Adult 15-20"	Adult 20+"
2109800	Barron	Hemlock	357	18	NR-2	352	0.20	218	0.99	1	18	228	105
2109600	Barron	Red Cedar	1841	18	C-NR	7777	0.06	6844	4.22	10	3671	3884	212
2742500	Bayfield	Bony	191	Slot14-18	C-NR	231	0.15	165	1.21	1	9	184	37
2742100	Bayfield	Middle Eau Claire	902	Slot14-18	C-NR	852	0.19	531	0.94	1	79	712	60
2902700	Bayfield	Pike Chain	714	Slot14-18	NR	714	0.10	581	1.00	4	117	520	73
2678100	Burnett	Lipsett	393	Slot20-24	O-ST	111	0.19	69	0.28	1	3	62	45
2351400	Chippewa	Long	1,052	18	C-NR	3,545	0.07	3,059	3.37	7	1,494	2,010	34
2295200	Iron	Trude	792	None	NR	1,818	0.04	1,689	2.30	71	1,164	511	72
2294900	Iron	Turtle Flambeau P	13,122	None	NR	36,855	0.02	35,158	2.81	7,047	20,800	7,682	1,326
2382300	Sawyer	Barber	238	Slot20-24	ST	428	0.15	301	1.80	6	135	227	60
2390800	Sawyer	Lac Courte Oreille	5,039	Slot20-24	C-NR	7,230	0.27	3,426	1.43	3	545	5,290	1,392
2046600	Sawyer	Windigo	522	1>14	NR	1,063	0.19	659	2.04	1	2	898	162
2615100	St. Croix	Cedar	1,100	Slot14-18	NR	3,485	0.13	2,568	3.17	1	186	3,166	132
2112800	Washburn	Balsam	295	18	NR	552	0.18	361	1.87	2	169	348	33
653700	Florence	Patten	255	Slot20-24	NR	503	0.10	403	1.97	1	20	313	169
394400	Forest	Metonga	1,991	Slot20-24	C-NR	5,770	0.10	4,624	2.90	36	701	2,402	2,631
417900	Oconto	Bass	142	18	C-ST	212	0.17	141	1.49	1	4	168	39
418700	Oconto	Boot	235	18	C-NR	248	0.30	100	1.05	1	3	152	92
971600	Oneida	Big Carr	213	Slot20-24	REM	61	0.30	25	0.29	1	1	1	58
1589600	Oneida	Sweeny	187	Slot20-24	ST	247	0.12	187	1.32	1	1	86	159
1835300	Vilas	Big Muskellunge	930	1>14	NR	3,634	0.08	3,056	3.91	406	2,182	993	52
1629500	Vilas	Big Portage	638	Slot14-18	NR	3,244	0.09	2,654	5.09	262	1,542	1,432	8
2339900	Vilas	Escanaba	293	28	NR	1,895	0.09	1,548	6.47	33	391	1,362	110
995200	Vilas	Laura	628	1>14	NR	2,728	0.04	2,516	4.34	687	1,742	287	12
2954500	Vilas	Lynx	339	Slot20-24	NR	468	0.17	309	1.38	62	282	85	39
2335300	Vilas	Sanford	88	1>14	NR	190	0.07	163	2.16	1	27	124	39
2331600	Vilas	Trout	3,816	Slot20-24	C-ST	6,127	0.20	3,753	1.61	15	915	3,063	2,134
2339100	Vilas	White Sand (K)	734	18	C-ST	1,027	0.16	704	1.40	9	248	690	80
672900	Florence	Keyes	210	18	O-ST	65	0.14	47	0.31	1	3	18	43
2336800	Vilas	Wildcat	505	Slot20-24	C-ST	719	0.09	589	1.42	14	246	339	121

Appendix D. Continued.

MWBC	County	Lake	Acres	Angler Reg	Recruit Code	PE - Males	CV Male PE	PE - Females	CV Female PE	M:F Ratio
2109800	Barron	Hemlock	357	18	NR-2	165	0.15	195	0.37	0.85
2109600	Barron	Red Cedar	1841	18	C-NR	6,809	0.06	3,135	0.62	2.17
2742500	Bayfield	Bony	191	Slot14-18	C-NR	158	0.15	94	0.40	1.68
2742100	Bayfield	Middle Eau Claire	902	Slot14-18	C-NR	680	0.20	126	0.26	5.40
2902700	Bayfield	Pike Chain	714	Slot14-18	NR	590	0.10	165	0.39	3.58
2678100	Burnett	Lipsett	393	Slot20-24	O-ST	43	0.16	78	0.34	0.55
2351400	Chippewa	Long	1,052	18	C-NR	2,289	0.07	2,384	0.31	0.96
2295200	Iron	Trude	792	None	NR	1,344	0.03	1,120	0.27	1.20
2294900	Iron	Turtle Flambeau F	13,122	None	NR	29,712	0.02	31,217	0.40	0.95
2382300	Sawyer	Barber	238	Slot20-24	ST	321	0.17	84	0.14	3.82
2390800	Sawyer	Lac Courte Oreille	5,039	Slot20-24	C-NR	4,255	0.29	2,640	0.52	1.61
2046600	Sawyer	Windigo	522	1>14	NR	555	0.20	697	0.45	0.80
2615100	St. Croix	Cedar	1,100	Slot14-18	NR	2,688	0.14	494	0.43	5.44
2112800	Washburn	Balsam	295	18	NR	423	0.19	142	0.55	2.98
653700	Florence	Patten	255	Slot20-24	NR	286	0.10	201	0.23	1.43
394400	Forest	Metonga	1,991	Slot20-24	C-NR	2,641	0.07	3,069	0.20	0.86
417900	Oconto	Bass	142	18	C-ST	74	0.11	21	0.00	3.53
418700	Oconto	Boot	235	18	C-NR	129	0.29	60	0.37	2.14
971600	Oneida	Big Carr	213	Slot20-24	REM	15	0.33	33	0.00	0.45
1589600	Oneida	Sweeny	187	Slot20-24	ST	70	0.10	192	0.20	0.36
1835300	Vilas	Big Muskellunge	930	1>14	NR	3,129	0.08	547	0.40	5.72
1629500	Vilas	Big Portage	638	Slot14-18	NR	2,054	0.08	1,904	0.40	1.08
2339900	Vilas	Escanaba	293	28	NR	1,024	0.12	622	0.12	1.65
995200	Vilas	Laura	628	1>14	NR	2,479	0.04	464	0.37	5.34
2954500	Vilas	Lynx	339	Slot20-24	NR	364	0.15	63	0.38	5.78
2335300	Vilas	Sanford	88	1>14	NR	102	0.00	46	0.00	2.22
2331600	Vilas	Trout	3,816	Slot20-24	C-ST	3,037	0.09	2,681	0.36	1.13
2339100	Vilas	White Sand (K)	734	18	C-ST	341	0.11	1,925	0.53	0.18
672900	Florence	Keyes	210	18	O-ST	24	0.12	37	0.18	0.66
2336800	Vilas	Wildcat	505	Slot20-24	C-ST	304	0.11	271	0.13	1.12

Appendix E. YOY Walleye Survey Summaries.

				Walleye Recruit Code																			
Lake	County	WBIC	Acres		Model	Date	Temp	Total Shore	ShockMI	%Shock	Age0	Age0 Min Length	Age0 Max Length	Age0 Modal Length	Age0MI	Serns	Hansen	Age1	Age1 Min Length	Age1 Max Length	Age1 Modal Length	Age1MI	WESock
EMILY	FLORENCE	651600	191	C-ST	stocked	10/10/2016	62	2.5	2.6	104.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	N
FAY	FLORENCE	677100	282	ST	stocked	9/26/2016	61	4.5	3.7	82.2	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
HALSEY	FLORENCE	679300	517	O-ST	remnant	9/26/2016	NA	4.1	1.7	41.5	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	EB
KEYES	FLORENCE	672900	210	C-ST	stocked	10/10/2016	61	3.3	3.4	103.0	0.0	-	-	-	0.00		0.00	1.0	-	9.4	-	0.3	N
LONG	FLORENCE	677400	340	O	#N/A	9/20/2016	69	4.8	1.1	22.9	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
PATTEN	FLORENCE	653700	255	NR	natural	10/4/2016	66	3.9	4.1	105.1	32.0	4.8	6.2	5.5	7.80		NA	55.0	9.1	12.9	10.5,11.3	13.4	N
SEA LION	FLORENCE	672300	125	O-ST	remnant	10/10/2016	61	3.8	3.2	84.2	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	N
SEIDEL	FLORENCE	672000	55	O	#N/A	10/4/2016	64	1.4	0.5	35.7	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
BEAR	FOREST	552100	68	REM	remnant	9/28/2016	60	1.7	1.6	94.1	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
CRANE	FOREST	388500	337	ST	stocked	9/6/2016	76	3.9	4.3	110.3	0.0	-	-	-	0.00		NA	33.0	8.1	10.6	9.5,10.1	7.7	A
FRANKLIN	FOREST	692900	892	C-NR	natural	9/15/2016	68	6.6	7.4	112.1	27.0	3.2	7.7	4.3,5.2	3.65		0.26	4.0	8.5	9.2	-	0.5	A
LOST	FOREST	378200	75	NONE	none	10/11/2016	61	1.5	0.7	46.7	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
METONGA	FOREST	394400	1991	C-ST	stocked	9/29/2016	63-65	7.9	11.2	141.8	125.0	5.2	8.7	7.6	11.16		1.50	8.0	10.1	12.2	-	0.7	N
RANGELINE	FOREST	478200	82	C-ST	stocked	9/28/2016	60	1.3	1.8	138.5	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	N
ROBERTS	FOREST	378400	415	C-ST	stocked	10/11/2016	62	4.5	5.0	111.1	5.0	6.7	7.9	-	1.00		0.03	8.0	8.8	11.4	-	1.6	N
VAN ZILE	FOREST	608400	81	O	#N/A	9/20/2016	69	1.8	2.0	111.1	0.0	-	-	-	0.00		NA	4.0	10.0	10.9	-	2.0	N
MARY	LANGLADE	496300	156	O	#N/A	9/27/2016	66	2.0	2.0	100.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	N
ROSE	LANGLADE	494200	112	ST	stocked	9/20/2016	69	7.3	7.3	100.0	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
SAWYER	LANGLADE	198100	149	C-NR	natural	9/26/2016	65	5.2	3.0	57.7	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
SUMMIT	LANGLADE	1445600	282	O-ST	remnant	9/29/2016	61	3.3	3.3	100.0	0.0	-	-	-	0.00		NA	13.0	8.9	11.2	-	3.9	N
UPPER POST	LANGLADE	399200	757	ST	stocked	9/28/2016	60	7.6	4.7	61.8	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
WHITE	LANGLADE	365500	153	O-ST	remnant	9/19/2016	68	2.4	2.4	100.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	A
PESABIC	UNCOLN	1481600	146	ST	stocked	9/13/2016	67	2.3	2.3	100.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	A
PINE	UNCOLN	1012100	134	ST	stocked	9/12/2016	67	2.7	2.7	100.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	A
SEVEN ISLAND	UNCOLN	1490300	132	C-NR	natural	9/27/2016	62	4.0	4.0	100.0	85.0	6.4	7.8	7	21.25		4.11	31.0	9.2	11.3	10.3	7.8	N
SILVER	LINCOLN	1017400	95	NR	natural	10/4/2016	60	2.3	2.3	100.0	3.0	7.4	8.2	-	1.30		NA	0.0	-	-	-	0.0	N
SOMO	LINCOLN	1547700	472	C-ST	stocked	9/8/2016	71	14.2	4.0	28.2	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
SPIRIT RESERVOIR	LINCOLN	1506800	1664	NR	natural	10/3/2016	61	50.3	4.3	8.5	116.0	5	8.4	6.6	26.98		NA	6.0	9.5	10.5	-	1.4	N
SQUAW	UNCOLN	1564400	79	ST	stocked	9/15/2016	68	2.3	2.3	100.0	5.0	8.4	8.6	8.5	2.17		0.12	6.0	9.0	10.4	-	2.6	N
TUG	UNCOLN	1482400	151	C-NR	natural	9/14/2016	70	2.7	2.3	85.2	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
MISSION	MARATHON	1005400	104	NONE	none	9/28/2016	62	2.1	2.2	104.8	-	-	-	-	-		-	-	-	-	-	-	N
MISSION	MARATHON	1005400	104	NONE	none	10/4/2016	62	2.1	2.2	105	-	-	-	-	-		-	-	-	-	-	-	N
MISSION	MARATHON	1005400	104	NONE	none	10/11/2016	60	2.1	2.2	105	-	-	-	-	-		-	-	-	-	-	-	N
PIKE	MARATHON	1403600	205	ST	stocked	9/27/2016	61	2.6	2.4	92	0	-	-	-	0.00		NA	0	-	-	-	0.00	A
BIG EAU PLEINE	MARATHON	1427400	6830	NR	natural	11/08/2016	52	66.3	2.0	3	181	5.5	8.4	6.7	90.50		NA	1	9.5	9.9	-	0.50	B
HIGH FALLS FLOWAGE	MARINETTE	540600	1498	ST	stocked	9/27/2016	58	30.2	10.6	35	0	-	-	-	0.00		NA	9	8.8	10.7	-	0.85	N
SANDSTONE FLOWAGE	MARINETTE	531300	153	C-NR	natural	9/28/2016	61	6.4	3.8	59	0	-	-	-	0.00		NA	0	-	-	-	0.00	N
ARCHIBALD	OCONTO	417400	393	C-ST	stocked	9/13/2016	69	8.8	5.5	63	37	5.8	7.2	6.4	6.73		NA	1	10.0	10.0	-	0.18	A
BASS	OCONTO	417900	142	C-ST	stocked	10/11/2016	59	2.7	2.7	100	0	-	-	-	0.00		NA	0	-	-	-	0.00	N
BOOT	OCONTO	418700	235	C-NR	natural	10/11/2016	59	3.8	4.0	105	3	6.5	7.6	-	0.75		NA	3	10.0	11.1	-	0.75	N
TOWNSEND FLOWAGE	OCONTO	465000	476	O-ST	remnant	9/6/2016	74	11.6	6.0	52	0	-	-	-	0.00		NA	0	-	-	-	0.00	A
WAUBEE	OCONTO	439500	124	O-ST	remnant	9/29/2016	64	3.3	3.5	106	7	6.2	8.3	-	2.00		0.10	0	-	-	-	0.00	EB
BIG CARR	ONEIDA	971600	213	C-NR	natural	9/19/2016	67	3.6	4.5	125.0	0.0	-	-	-	0.00		0.00	0.0	-	-	-	0.0	N
CLEAR	ONEIDA	977500	846	NR	natural	10/19/2016	55	13.8	5.9	42.9	8.0	5.5	7.6	-	1.36		NA	0.0	-	-	-	0.0	N
EAST HORSEHEAD	ONEIDA	1523000	184	ST	stocked	9/7/2016	70	3.7	3.2	86.5	0.0	-	-	-	0.00		NA	1.0	9.7	9.7	-	0.3	A
GEORGE	ONEIDA	1569600	435	C-NR	natural	9/28/2016	64	6.2	6.3	101.6	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	N
GILMORE	ONEIDA	1589300	320	ST	stocked	10/4/2016	61	4.4	4.1	93.2	0.0	-	-	-	0.00		NA	3.0	10.5	11.5	-	0.7	N
GILMORE	ONEIDA	1589300	320	ST	stocked	10/18/2016	56	4.4	4.1	93.2	-	-	-	-	-		NA	-	-	-	-	-	N
GILMORE	ONEIDA	1589300	320	ST	stocked	10/25/2016	50	4.4	4.1	93.2	-	-	-	-	-		NA	-	-	-	-	-	N
KATHERINE	ONEIDA	1543300	590	NR	natural	10/27/2016	54	9.7	5.8	59.8	5.0	6.9	7.9	-	0.86		NA	0.0	-	-	-	0.0	N
KAWAGUESAGA	ONEIDA	1542300	670	C-ST	stocked	9/28/2016	61	11.1	11.6	104.5	0.0	-	-	-	0.00		NA	73.0	9.3	11.5	10.4	6.3	N
LONG	ONEIDA	1001300	113	C-NR	natural	9/14/2016	72	1.5	2.6	173.3	10.0	5.9	7.1	-	3.85		NA	0.0	-	-	-	0.0	A
MINOCQUA	ONEIDA	1542400	1360	C-ST	stocked	9/22/2016	67	19.1	11.6	61	1	-	6.3	-	0.09		NA	40	7.8	11.3	9.8,10.5	3.45	N
MUSKELLUNGE	ONEIDA	1595600	284	C-NR	natural	9/6/2016	69	4.0	4.2	105	0	-	-	-	0.00		0.00	0	-	-	-	0.00	A
PELICAN	ONEIDA	1579900	3585	NR	natural	9/20/2016	68	16.7	16.7	100	2662	3.9	7.9	6.1	159.40		NA	60	8.0	9.1	8.7	3.59	N
PICKEREL	ONEIDA	1590400	736	ST	stocked	10/20/2016	53	7.7	8.2	106	0	-	-	-	0.00		0.00	0	-	-	-	0.00	N
PICKEREL	ONEIDA	1590400	736	ST	stocked	10/24/2016	50	7.7	8.2	106	-	-	-	-	-		0.00	-	-	-	-	-	N
PICKEREL	ONEIDA	1590400	736	ST	stocked	11/1/2016	49	7.7	8.2	106	-	-	-	-	-		0.00	-	-	-	-	-	N
SEVENMILE	ONEIDA	1605800	503	C-ST	stocked	9/26/2016	62	6.1	3.5	57	43	5.9	7.3	6.6	12.29		NA	21	8.5	11.4	10.2	6.00	B
SQUASH	ONEIDA	1019500	396	C-NR	natural	9/12/2016	72																

Appendix E. Continued.

Lake	County	WBIC	Acres	Walleye Recruit Code	Model	Date	Temp	Total Shore	ShockMI	%Shock	Age0	Age0 Min Length	Age0 Max Length	Age0 Modal Length	Age0MI	Serns	Hansen	Age1	Age1 Min Length	Age1 Max Length	Age1 Modal Length	Age1MI	WESock
THOMPSON	ONEIDA	1569900	382	C-ST	stocked	9/8/2016	73	6.9	7.7	112	0	-	-	-	0.00		NA	2	8.6	9.1	-	0.26	A
TOMAHAWK	ONEIDA	1542700	3392	C-ST	stocked	9/13/2016	69	30.2	30.2	100	2	6.6	7.0	-	0.07		NA	0	-	-	-	0.00	A
TWO SISTERS	ONEIDA	1588200	719	C-NR	natural	10/3/2016	63	9.3	9.8	105	31	6.5	8.1	7.7	3.16	0.21	0	-	-	-	-	0.00	B
ALDER	VILAS	2329600	274	C-NR	natural	9/29/2016	62	3.9	3.0	77	4	6.5	7.9	-	1.33	NA	12	7.8	10.1	9.0	4.00	A	
ALLEQUASH	VILAS	2332400	426	C-ST	stocked	10/19/2016	53	5.8	2.9	50	-	-	-	-	-	NA	-	-	-	-	-	B	
ALLEQUASH	VILAS	2332400	426	C-ST	stocked	10/21/2016	48	5.8	2.9	50	-	-	-	-	-	NA	-	-	-	-	-	B	
ALLEQUASH	VILAS	2332400	426	C-ST	stocked	10/25/2016	48	5.8	2.9	50	-	-	-	-	-	NA	-	-	-	-	-	B	
ARROWHEAD	VILAS	1541500	99	ST	stocked	9/1/2016	72	2.0	2.3	115	0	-	-	-	0.00	0.00	0	-	-	-	-	0.00	N
BIG ARBOR VITAE	VILAS	1545600	1090	NR	natural	10/4/2016	61	7.8	8.7	112	523	5.3	8.0	6.7,7.2	60.11	NA	29	8.3	11.0	9.8,10.5	3.33	N	
BIG MUSKELLUNGE	VILAS	1835300	930	NR	natural	10/6/2016	62	10.2	10.7	105	466	3.5	8.3	4.7,5.7,6.2	43.55	NA	42	8.4	10.8	9.6	3.93	N	
BIG PORTAGE	VILAS	1629500	638	NR	natural	10/12/2016	56	6.8	7.0	103	305	4.2	7.7	5.9	43.57	12.63	13	8.1	10.5	-	1.86	N	
BIG ST GERMAIN	VILAS	1591100	1617	C-ST	stocked	10/12/2016	54	7.6	8.3	109	271	4.6	8.2	7.3	32.65	8.05	4	8.4	10.3	-	0.48	B	
BRANDY	VILAS	1541300	110	NR-2	remnant	10/18/2016	56	2.1	2.1	100	0	-	-	-	0.00	NA	0	-	-	-	-	0.00	N
BRANDY	VILAS	1541300	110	NR-2	remnant	10/25/2016	51	2.1	2.1	100	-	-	-	-	-	NA	-	-	-	-	-	N	
BRANDY	VILAS	1541300	110	NR-2	remnant	11/1/2016	50	2.1	2.1	100	-	-	-	-	-	NA	-	-	-	-	-	N	
DEAD PIKE	VILAS	2316600	297	C-ST	stocked	9/7/2016	70	3.8	3.5	91	0	-	-	-	0.00	0.00	2	9.6	9.6	-	0.57	A	
ESCANABA	VILAS	2339900	293	NR	natural	9/8/2016	70	5.2	5.2	100	134	4.4	7.6	6.1	25.77	NA	59	8.3	10.2	9.3	11.35	N	
ESCANABA	VILAS	2339900	293	NR	natural	9/12/2016	69	5.2	5.2	100	89	-	-	-	17.12	NA	47	-	-	-	9.04	N	
ESCANABA	VILAS	2339900	293	NR	natural	9/28/2016	59	5.2	5.2	100	84	4.5	7.1	4.9,6.5	16.15	NA	27	8.5	10.6	8.7,9.6	5.19	N	
ESCANABA	VILAS	2339900	293	NR	natural	10/4/2016	62	5.2	5.2	100	128	4.4	8.0	5.0,6.7	24.62	NA	46	8.4	10.8	10.0	8.85	N	
ESCANABA	VILAS	2339900	293	NR	natural	10/10/2016	56	5.2	5.2	100	188	3.9	8.1	5.0,6.5	36.15	NA	50	8.4	11.0	9.8	9.62	N	
FISHTRAP	VILAS	2343200	329	C-NR	natural	9/20/2016	65	5.6	5.8	104	12	5.2	6.8	-	2.07	0.11	22	7.1	9.6	8.3	3.79	B	
HIGH	VILAS	2344000	734	C-NR	natural	10/13/2016	54	9.4	8.0	85	11	7.3	8.4	8.0	1.38	0.06	32	8.7	10.1	9.2	4.00	B	
HUNTER	VILAS	991700	184	C-ST	stocked	9/12/2016	69	3.2	3.5	109	22	5.6	7.0	6.4	6.29	NA	5	9.8	10.8	-	1.43	B	
KENTUCK	VILAS	716800	958	C-NR	natural	10/3/2016	59	6.0	6.6	110	291	6.7	9.1	7.8,8.3	44.09	12.87	0	-	-	-	0.00	B	
LAURA	VILAS	995200	599	NR	natural	9/28/2016	62	4.8	5.3	110	0	-	-	-	0.00	0.00	0	-	-	-	0.00	N	
LITTLE ARBOR VITAE	VILAS	1545300	534	NR	natural	10/19/2016	51	7.1	5.3	75	127	6.1	8.6	7.7	23.96	NA	38	8.3	11.4	-	7.17	B	
LITTLE JOHN	VILAS	2332300	166	C-NR	natural	10/11/2016	57	3.3	2.8	85	30	6.1	8.4	7.3	10.71	NA	2	8.3	9.2	-	0.71	N	
LITTLE ST GERMAIN	VILAS	1596300	980	ST	stocked	10/20/2016	53	12.9	15.5	120	0	-	-	-	0.00	0.00	103	7.6	12.3	10.8	6.65	N	
LITTLE ST GERMAIN	VILAS	1596300	980	ST	stocked	10/24/2016	50	12.9	15.5	120	-	-	-	-	-	0.00	-	-	-	-	-	N	
LITTLE SPIDER	VILAS	1540400	235	C-ST	stocked	10/13/2016	54	4.6	4.6	100	0	-	-	-	0.0	0.0	22	7.5	10.1	-	4.8	N	
LITTLE SPIDER	VILAS	1540400	235	C-ST	stocked	10/18/2016	54	4.6	4.4	96	-	-	-	-	-	NA	-	-	-	-	-	N	
LITTLE SPIDER	VILAS	1540400	235	C-ST	stocked	11/02/2016	51	4.6	5.0	109	-	-	-	-	-	0.00	-	-	-	-	-	N	
LITTLE TROUT	VILAS	2321600	978	C-	natural	9/12/2016	67	5.4	3.2	59	0	-	-	-	0.00	0.00	3	8.3	9.0	-	0.94	A	
LONG	VILAS	1602300	872	C-ST	stocked	9/13/2016	67	8.2	7.5	91	0	-	-	-	0.00	0.00	43	8.3	11.8	9.8, 10.7	5.73	N	
LYNX	VILAS	2954500	339	NR	natural	9/20/2016	66	6.8	5.5	80.9	57.0	3.7	6.4	4.2	10.36	NA	7.0	6.9	8.5	-	1.3	N	
MUSKELLUNGE	VILAS	1596600	272	ST	stocked	9/7/2016	70	3.6	4.0	111.1	0.0	-	-	-	0.00	NA	0.0	-	-	-	0.0	N	
PIONEER	VILAS	1623400	427	ST	stocked	9/1/2016	68	3.7	4.2	113.5	0.0	-	-	-	0.00	0.00	0.0	-	-	-	0.0	N	
PLUM	VILAS	1592400	1033	NR	natural	10/11/2016	58	14.5	15.6	107.6	582.0	3.3	7.9	5.4,6.0	37.31	9.91	57.0	8.0	10.1	9.0	3.7	N	
SANFORD	VILAS	2335300	88	NR	natural	9/6/2016	71	2.4	2.5	104.2	18.0	5.5	7.7	7.4	7.20	NA	15.0	8.5	12.2	10.8	6.0	N	
SANFORD	VILAS	2335300	88	NR	natural	9/14/2016	67	2.4	2.5	104.2	17.0	6.5	8	7.2	6.80	NA	6.0	10.3	11.9	-	2.4	N	
SANFORD	VILAS	2335300	88	NR	natural	9/20/2016	65	2.4	2.5	104.2	14.0	6.3	8.1	7.2	5.60	NA	10.0	9.8	12.2	-	4.0	N	
SANFORD	VILAS	2335300	88	NR	natural	9/29/2016	59	2.4	2.5	104.2	16.0	6.6	8.3	-	6.40	NA	8.0	8.7	12.0	-	3.2	N	
SANFORD	VILAS	2335300	88	NR	natural	10/3/2016	62	2.4	2.5	104.2	10.0	5.9	8	-	4.00	NA	6.0	9.7	11.7	-	2.4	N	
SANFORD	VILAS	2335300	88	NR	natural	10/11/2016	56	2.4	2.5	104.2	13.0	7	8.1	-	5.20	NA	7.0	8.5	12.0	-	2.8	N	
SNIPER	VILAS	1018500	239	NR	natural	9/27/2016	60	3.5	4.5	128.6	620.0	3.7	7.6	4.9,5.8	137.78	76.47	243.0	7.7	9.2	8.1	54.0	N	
SPARKLING	VILAS	1881900	154	C-ST	stocked	9/14/2016	69	2.3	2.3	100.0	0.0	-	-	-	0.00	0.00	3.0	9.9	10.6	-	1.3	N	
SPIDER	VILAS	2329300	272	C-NR	natural	9/28/2016	59	5.9	6.2	105.1	120.0	3.8	8.3	6.7,7.4	19.35	NA	33.0	7.9	11.0	9.8	5.3	A	
TROUT	VILAS	2331600	3816	C-ST	stocked	10/5/2016	60	17.9	17.9	100.0	60.0	5.5	8.3	7.7	3.35	NA	29.0	10.2	11.7	11.5	1.6	N	
UPPER GRESHAM	VILAS	2330800	366	ST	stocked	9/8/2016	70	5.8	6.0	103.4	0.0	-	-	-	0.00	0.00	0.0	-	-	-	0.0	A	
UPPER GRESHAM	VILAS	2330800	366	ST	stocked	10/18/2016	52	5.8	6.1	105.2	-	-	-	-	-	0.00	-	-	-	-	-	A	
UPPER GRESHAM	VILAS	2330800	366	ST	stocked	10/20/2016	53	5.8	6.2	106.9	-	-	-	-	-	0.00	-	-	-	-	-	A	
UPPER GRESHAM	VILAS	2330800	366	ST	stocked	10/24/2016	51	5.8	6.1	105.2	-	-	-	-	-	0.00	-	-	-	-	-	A	
LAKE GAULLEE	ASHLAND	2935500	213	O-ST	remnant	9/8/2016	68	2.9	3.1	106.9	8.0	4.7	10	None	2.58	0.15	0.0	-	-	-	0.0	A	
MEDER	ASHLAND	2935300	135	C-ST	stocked	9/1/2016	71	2.2	2.2	100.0	7.0	5.6	6.8	None	3.18	NA	5.0	9.9	11.3	None	2.3	N	
POTTER	ASHLAND	2917200	29	ST	stocked	10/5/2016	61	0.9	0.9	100.0	0.0	-	-	-	0.00	0.00	3.0	9.7	10.8	None	3.3	N	
SPIDER	ASHLAND	2918600	103	ST	stocked	10/6/2016	62	2.7	2.4	88.9	2.0	7.2	7.3	None	0.83	NA	10.0	8.0	10.2	8.3	4.2	N	
SPILLERBERG	ASHLAND	2936200	75	NR	natural	10/5/2016	60	1.5	1.6	106.7	10.0	6.3	8	None	6.25	0.61	66.0	8.7	11.0	9.7	41.3	N	
UPPER CLAM	ASHLAND	2429600	166	C-ST	stocked	9/12/2016	69	3.2	2.8	87.5	1.0	8.3	8.3	None	0.36	NA	9.0	8.6	10.1	9.4	3.2	A	
BEAR	BARRON	2105100	1358	C-ST	stocked	9/26/2016	63	14.9	6.9	46.3	0.0	-	-	-	0.00	NA	0.0	-	-	-	0.0	A	
BEAVER DAM	BARRON	2081200	1112	O-ST	remnant	9/27/2016	62	18.0	12.5	69.4	18.0	5.5	7.9	6.8,6.9	1.44	NA	14.0	9.5	11.9	10.8	1.1	BA	
GRANITE	BARRON	2100800	154	C-NR	natural	10/12/2016	55	3.4	3.4	100.0	75.0	5.5	8.4	7	22.06	4.36	23.0	9.7	11.0	10.8	6.8	N	
HEMLOCK	BARRON	2109800	357	NR-2	remnant	10/6/2016	62	6.9	6.9	100.0	6.0	5.5	6.5	None	0.87	0.03	2.0	9.5	9.7	None	0.3	N	
HORSESHOE	BARRON	2469800	115	ST	stocked	9/22/2016	66	2.5	2.5	100.0	0.0	-	-	-	0.00	0.00	4.0	9.5	10.4	None	1.6	A	
LOWER TURTLE	BARRON	2079700	276	C-ST	stocked	9/20/2016	69	3.8	3.8	100.0	1.0	8.2	8.2	None	0.26	NA	0.0	-	-	-	0.0	A	
UPPER TURTLE	BARRON	2079800	438	C-ST	stocked	9/19/2016	67	4.8	4.8	100.0	2.0	7.7	8.7	None	0.42	NA	0.0	-	-	-	0.0	A	

Appendix E. Continued.

Lake	County	WBIC	Acres	Walleye Recruit Code	Model	Date	Temp	Total Shore	ShockMI	%Shock	Age0	Age0 Min Length	Age0 Max Length	Age0 Modal Length	Age0MI	Serns	Hansen	Age1	Age1 Min Length	Age1 Max Length	Age1 Modal Length	Age1MI	WESTock
LOWER CLAM	BURNETT	2655300	337	REM	remnant	9/20/2016	67	3.8	3.8	100.0	142.0	5.1	8.8	6.9	37.37		9.94	7.0	11.3	13.4	13.0-13.4	1.8	N
SAND (NORTH)	BURNETT	2495100	962	O-ST	remnant	9/29/2016	62	8.3	4.7	56.6	6.0	7	8.1	None	1.28		NA	10.0	9.5	11.0	9.5	2.1	B
UPPER CLAM	BURNETT	2656200	1207	REM	remnant	9/20/2016	67	12.5	5.0	40.0	80.0	4.9	8.3	5.4,5.7,6.5	16.00		NA	30.0	10.2	12.4	11.5,11.7	6.0	N
HOLCOMBE FLOWA	CHIPPEWA	2184900	3890	NR	natural	10/18-19/2016	56	60.8	10.0	16.4	312.0	4.9	7.6	6.2,6.4	31.20		NA	211.0	7.8	11.7	9.0	21.1	N
LAKE WISSOTA	CHIPPEWA	2152800	6300	NR	natural	10/11/2016	62	56.3	11.4	20	817	4.8	8.3	6.7	71.67		NA	228	8.5	11.3	10.3	20.00	EB
LONG	CHIPPEWA	2351400	1052	C-NR	natural	10/5/2016	63	14.0	14.0	100	376	4.9	8.2	6.8	26.86		5.93	137	8.3	11.7	10.4	9.79	N
OTTER	CHIPPEWA	2157000	661	ST	stocked	9/28/2016	62	20.0	14.1	71	0	-	-	-	0.00		NA	46	11.5	14.4	12.5-12.9	3.26	N
MEAD	CLARK	2143900	320	ST	stocked	9/14/2016	66	8.2	8.2	100	0	-	-	-	0.00		0.00	0	-	-	-	0.00	A
AMNICON	DOUGLAS	2858100	426	C-NR	natural	9/29/2016	60	6.0	6.0	100	0	-	-	-	0.00		0.00	0	-	-	-	0.00	A
LAKE MINNESUING	DOUGLAS	2866200	432	C-ST	stocked	10/10/2016	58	6.9	6.9	100	2	6.4	6.5	None	0.29		NA	30	8.0	10.9	9.3	4.35	N
LAKE NEBAGAMON	DOUGLAS	2865000	914	C-NR	natural	9/27/2016	60	10.8	10.8	100	168	4.3	8.1	6.6	15.56		2.52	143	8.3	11.3	8.8,9.3	13.24	N
LOWER EAU CLAIRE	DOUGLAS	2741600	802	C-NR	natural	10/5/2016	62	7.8	7.8	100	52	5.3	7.4	6.2	6.67		0.67	2	11.2	11.6	None	0.26	N
ALTOONA	EAU CLAIRE	2128100	840	NR	natural	10/10/2016	57	9.4	4.0	43	184	5.9	7.9	7.0	46.00		NA	42	8.2	11.7	11.5	10.50	N
LAKE EAU CLAIRE	EAU CLAIRE	2133200	860	NR	natural	10/12/2016	55	24.3	4.0	86	170	5.6	7.8	6.8	42.50		NA	44	8.6	11.4	10.0	11.00	N
CEDAR	IRON	2309700	193	ST	stocked	9/19/2016	63	4.4	4.1	93	0	-	-	-	0.00		NA	15	9.0	11.5	None	3.66	A
ECHO	IRON	2301800	220	ST	stocked	9/6/2016	70	4.9	3.1	63	0	-	-	-	0.00		NA	11	7.8	9.5	None	3.55	A
FISHER	IRON	2307200	410	ST	stocked	9/15/2016	68	10.9	2.3	21	3	7.2	7.4	7.4	1.30		NA	3	8.5	9.7	None	1.30	N
LAKE OF THE FALLS	IRON	2298300	338	C-ST	stocked	9/13/2016	68	6.7	4.3	64	0	-	-	-	0.00		NA	1	7.3	7.3	None	0.23	A
MERCER	IRON	2313600	184	ST	stocked	10/4/2016	60	4.2	3.0	71	4	7.9	8.3	None	1.33		NA	1	9.0	9.0	None	0.33	N
PIKE	IRON	2299900	165	NR	natural	10/10/2016	54	2.7	2.9	107	9	6.9	8.3	None	3.10		0.20	9	8.9	11.2	None	3.10	N
PINE	IRON	2949200	312	NR	natural	9/22/2016	63	6.0	6.0	100	92	4.5	6.1	5.4	15.33		2.47	*	-	-	-	-	N
RANDALL	IRON	2318500	115	NR	natural	9/29/2016	59	2.1	2.1	100	0	-	-	-	0.00		0.00	8	7.0	7.7	None	3.81	N
SANDY BEACH	IRON	2316100	111	ST	stocked	10/5/2016	60	2.1	2.1	100	0	-	-	-	0.00		0.00	26	7.9	9.4	8.5,8.7,9.0	12.38	N
SPIDER	IRON	2306300	352	NR	natural	10/11/2016	56	7.3	7.3	100	23	6.8	8.7	7.5	3.15		0.21	27	9.0	10.8	9.5,9.7,9.8,10.2	3.70	N
TRUDE	IRON	2295200	792	NR	natural	9/21/2016	65	15.1	5.7	38	167	4.9	7.6	6.7	29.30		NA	24	9.3	11.8	10.2	4.21	N
TURTLE FLAMBEAU F	IRON	2294900	13122	NR	natural	9/21-22/2016	64	206.3	53.9	26	2836	3.3	7.2	5.3	52.62		NA	645	7.3	10.3	9.2	11.97	N
BALSAM	POLK	2620600	2054	O-ST	remnant	9/29/2016	62	22.7	22.7	100	0	-	-	-	0.00		NA	0	-	-	-	0.00	A
BIG ROUND	POLK	2627400	1015	ST	stocked	9/28/2016	60	5.7	5.7	100	0	-	-	-	0.00		0.00	17	8.3	11.0	None	2.98	N
HALF MOON	POLK	2621100	579	O-ST	remnant	10/11/2016	58	7.1	5.6	79	1	6.8	6.8	None	0.18		0.00	4	10.8	11.1	None	0.71	B
NORTH PIPE	POLK	2485700	58	C-ST	stocked	10/10/2016	58	1.6	1.6	100	0	-	-	-	0.00		0.00	0	-	-	-	0.00	N
PIPE	POLK	2490500	284	C-ST	stocked	10/10/2016	58	5.0	5.0	100	0	-	-	-	0.00		0.00	0	-	-	-	0.00	N
WARD	POLK	2599400	91	ST	stocked	10/3/2016	64	2.3	2.3	100	0	-	-	-	0.00		0.00	0	-	-	-	0.00	A
BASS	PRICE	2279800	84	O-ST	remnant	10/6/2016	64	1.6	1.6	100	0	-	-	-	0.00		0.00	7	10.6	11.7	None	4.38	A
BIG DARDIS	PRICE	2244200	144	C-ST	stocked	9/29/2016	61	2.8	2.6	93	0	-	-	-	0.00		NA	4	8.6	11.4	None	1.54	A
CROWLEY FLOWAGE	PRICE	2287200	422	NR-2	remnant	10/4/2016	62	16.2	3.0	19	23	3.5	6.3	None	7.67		NA	24	7.7	10.8	None	8.00	N
DUNDY	PRICE	2240100	379	C-NR	natural	10/10/2016	55	10.1	3.1	31	6	4.5	6.2	None	1.94		NA	13	9.4	11.7	9.4	4.19	EB
ELK	PRICE	2240000	88	C-NR	natural	10/10/2016	55	2.8	2.6	93	37	5.1	6.8	5.4	14.23		NA	13	8.7	10.3	10.1	5.00	N
LONG	PRICE	2239300	418	NR	natural	10/13/2016	55	11.9	3.0	25	68	4.5	7.7	6.6,6.8	22.67		NA	2	10.7	11.8	None	0.67	N
LOWER PARK FALLS	PRICE	2290100	71	NR	natural	9/20/2016	65	4.2	3.5	83	3	4.9	6.0	None	0.86		NA	*	-	-	-	-	N
MUSSER	PRICE	2245100	563	ST	stocked	9/28/2016	58	12.1	4.0	33.1	0.0	-	-	-	0.00		NA	0.0	-	-	-	0.0	A
PATTERSON	PRICE	1872500	70	O-ST	remnant	10/3/2016	63	1.8	2.0	111.1	0.0	-	-	-	0.00		NA	3.0	8.5	9.1	None	1.5	N
PIKE	PRICE	2268300	806	NR	natural	10/11/2016	57	10.9	4.2	38.5	110.0	5.6	8	6.8	26.19		NA	29.0	9.5	11.8	10.2,10.7,11.1	6.9	N
PIXLEY FLOWAGE	PRICE	2288900	193	NR	natural	10/3/2016	62	8.1	3.0	37.0	45.0	4	6.7	4.5,5.1,5.6,5.7	15.00		NA	13.0	7.5	10.5	None	4.3	N
ROUND	PRICE	2267800	726	NR	natural	10/11/2016	58	5.1	6.2	121.6	336.0	5.4	7.9	6.6	54.19		17.77	64.0	8.2	10.9	9.2,9.8,10.3	10.3	N
SOLBERG	PRICE	2242500	859	NR	natural	10/5/2016	61	12.4	4.0	32.3	6.0	6.8	7.4	None	NA		NA	71.0	8.6	11.7	10.2	17.8	N
TURNER	PRICE	2268500	149	NR-2	remnant	10/4/2016	62	2.6	2.6	100	85	6.8	8.4	7.7	32.6923077		8.06142799	2	9.2	10.7	None	0.76923077	N
UPPER PARK FALLS F	PRICE	2290500	431	REM	remnant	9/19/2016	67	15.4	3	19.4805195	6	5.5	6	5.6	2		NA	3	7.7	8.7	None	1	N
WILSON	PRICE	2239400	351	NR	natural	10/12/2016	55	9.6	3	31.25	15	6.8	8.2	None	5		NA	0	-	-	-	0	N
WORCESTER	PRICE	2210900	100	NR	natural	10/7/2016	59	2	2.1	105	0	-	-	-	0		0	0	-	-	-	0	N
CHAIN	RUSK	2350500	468	ST	stocked	10/6/2016	62	7.9	5.9	74.6835443	3	6.4	7.5	None	0.50847458		NA	30	7.9	10.9	8.5	5.08474576	N
ISLAND	RUSK	2350200	526	C-ST	stocked	10/6/2016	63	5.8	5.8	100	0	-	-	-	0		0	31	9	10.8	9.8	5.34482759	N
PULASKI	RUSK	1875900	126	C-ST	stocked	9/20/2016	70	2.5	2.5	100	14	5.9	8.1	None	5.6		0.51048757	1	10.8	10.8	None	0.4	A
SAND	RUSK	2353600	262	ST	stocked	10/3/2016	65	4.8	4.8	100	0	-	-	-	0		0	89	7.8	9.8	8.8	18.5416667	N
BARBER	SAWYER	2382300	238	ST	stocked	9/26/2016	62	4.8	2.5	52.0833333	0	-	-	-	0		NA	7	9.4	9.9	9.7	2.8	A
BLACK DAN	SAWYER	2381900	128	O-ST	remnant	9/13/2016	68	3	3	100	0	-	-	-	0		0	6	9.8	10.7	None	2	A
BLAISDELL	SAWYER	2402200	356	C-ST	stocked	10/11/2016	54	7.6	7.5	98.6842105	9	4.9	6.5	None	1.2		NA	12	8.5	10.4	None	1.6	N
BLUEBERRY	SAWYER	1835700	280	ST	stocked	10/4/2016	63	4.2	4.2	100	0	-	-	-	0		0	0	-	-	-	0	A
CONNORS	SAWYER	2275100	429	NR	natural	9/30/2016	61	5	3	60	53	5.5	7.8	7.1	17.6666667		NA	16	9.2	44.6	9.9	5.33333333	N
DURPHEE	SAWYER	2396800	193	ST	stocked	9/19/2016	66	2.7	2	74.074071	0	-	-	-	0		NA	1	11.2	11.2	None	0.5	A
GHOST	SAWYER	2423000	372	ST	stocked	10/10/2016	55	7.3	3.3	45.2054795	1	7	7	None	0.3030303		NA	22	8	10.6	8.1,8.6	6.66666667	N
GRINDSTONE	SAWYER	2391200	3111	NR	natural	10/5/2016	59	10.5	10.5	100	465	3.9	8.6	6.6	44.2857143		12.9591182	30	8.8	11.2	9.8	2.85714286	N
ISLAND	SAWYER	2381800	67	O-ST	remnant	9/13/2016	67	1.5	1.5	100	0	-	-	-	0		0	2	10	10.3	None	1.33333333	A
LAC COURTE OREILLI	SAWYER	2390800	5038	C-NR	natural	9/28/2016	60	25.4	25.4	100	6	5.8	8.5	None	0.23622047		0.0036115	46	9	11.8	10.4	1.81102362	N

Appendix F. Walleye Exploitation Rates.

F-1. Information on fin clipped fish in population (prior to creel) and those observed in angler creels used to estimate angler harvest and exploitation rates during the 2016-2017 fishing season.

							Clips Given Prior to Creel				Clips Observed in Creel					
Year	WBIC	County	Lake	Acres	Recruit. Code	Size Limit	Clip Given	# Clips Given	#Clips ≥14"	#Clips ≥20"	# Clips Observed	# Clips Projected	# Clips Obs. ≥14"	# Clips Proj. ≥14"	# Clips Obs. ≥20"	# Clips Proj. ≥20"
2016	2742100	Bayfield	Middle Eau Claire	902	C-NR	14-18 slot	RP	361	341	59	3	18	2	12	2	12
2016	394400	Forest	Metonga	2157	C-NR	20-24 Slot	LV	2,237	1,943	736	25	109	25	109	3	13
2016	2295200	Iron	Trude	792	NR	none	RP	1,328	591	39	10	226	3	68	0	0
2016	2294900	Iron	Turtle Flambeau	13122	NR	none	RV	15,339	5,651	236	52	1071	24	494	2	41
2016	417900	Oconto	Bass	142	C-ST	18	LP	125	125	33	1	7	1	7	0	0
2016	418700	Oconto	Boat	230	C-NR	18	LP	81	81	25	1	2	1	2	1	2
2016	971600	Oneida	Big Carr	213	C-NR	20-24 Slot	LV	36	36	36	0	0	0	0	0	0
2016	2390800	Sawyer	Lac Courte Oreille	5039	C-NR	20-24 Slot	LV	799	735	126	4	31	4	31	0	0
2016	2046600	Sawyer	Windigo	522	C-NR	1>14	LV	279	279	25	2	17	2	17	0	0
2016	2615100	St. Croix	Cedar	1100	NR	14-18 slot	RV	807	786	38	0	--	0	--	0	--
2016	1835300	Vilas	Big Musky	930	NR	1>14	LV	1,323	599	24	51	317	31	193	3	19
2016	1629500	Vilas	Big Portage	638	NR	14-18 slot	LP	1,552	808	7	23	67	15	44	2	6
2016	995200	Vilas	Laura	599	NR	1>14	LV	1,681	451	11	4	12	3	9	0	0
2016	2954500	Vilas	Lynx	339	NR	20-24 Slot	LV	251	70	14	0	0	0	0	0	0
2016	2271600	Vilas	Squaw	785	NR	1>14	LV	623	67	3	15	70	0	0	0	0
2016	2331600	Vilas	Trout	3816	C-ST	20-24 Slot	LV	1,732	1,528	278	24	123	24	123	0	0

F-2. Estimated angler and tribal harvest and associated walleye exploitation rates for lakes surveyed during the 2016-2017 fishing season.

County	Lake	Acres	Adult PE	Angler Harvest	Tribal Harvest	Total Harvest	Angler Exploitation	Angler Exploitation ≥14"	Angler Exploitation ≥20"	Tribal Exploitation	Total Exploitation
Bayfield	Middle Eau Claire	902	852	126	263	389	0.0499	0.0352	0.2034	0.3087	0.3585
Forest	Metonga	2157	5770	678	866	1544	0.0487	0.0561	0.0178	0.1501	0.1988
Iron	Trude	792	1818	484	251	735	0.1702	0.1147	0.0000	0.1381	0.3082
Iron	Turtle Flambeau Fl.	13122	36855	14266	3293	17559	0.0698	0.0875	0.1745	0.0894	0.1592
Oconto	Bass	142	212	13	0	13	0.0560	0.0560	0.0000	0.0000	0.0560
Oconto	Boot	230	248	20	0	20	0.0247	0.0247	0.0800	0.0000	0.0247
Oneida	Big Carr	213	61	0	0	0	0.0000	0.0000	0.0000	0.0000	0.0000
Sawyer	Lac Courte Oreilles	5039	7230	934	412	1346	0.0388	0.0422	0.0000	0.0570	0.0958
Sawyer	Windigo	522	1063	166	91	257	0.0609	0.0609	0.0000	0.0856	0.1465
St. Croix	Cedar	1100	3485	295	272	567	--	--	--	0.0780	--
Vilas	Big Musky	930	3634	2283	548	2831	0.2396	0.3217	0.7770	0.1508	0.3904
Vilas	Big Portage	638	3244	399	178	577	0.0432	0.0541	0.8323	0.0549	0.0980
Vilas	Laura	599	2728	89	120	209	0.0071	0.0200	0.0000	0.0440	0.0511
Vilas	Lynx	339	468	0	42	42	0.0000	0.0000	0.0000	0.0897	0.0897
Vilas	Squaw	785	1779	524	173	697	0.1124	0.0000	0.0000	0.0972	0.2096
Vilas	Trout	3816	6127	902	430	1332	0.0710	0.0805	0.0000	0.0702	0.1412

Appendix G. Safe harvest of walleye and musky calculated for individual lakes within the Wisconsin Ceded Territory during 2016.

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Ashland	Augustine L	2410400	166			Other	5
Ashland	Bear L	2403200	204	Other	76	Other	6
Ashland	Beaver Dam L	2916700	118			Other	4
Ashland	Beaver L	2935400	25			Other	2
Ashland	Cub L	1842600	31			Other	2
Ashland	Day L	2430300	641	Other	17	1-2 Year Pe	90
Ashland	E Twin L	2429000	110			Other	4
Ashland	English L	2914800	244	Other	33	Other	7
Ashland	Eureka L	2935600	39			Other	2
Ashland	Gordon L	2406500	142	Other	54	Other	5
Ashland	L Galilee	2935500	213	Other	8	Other	6
Ashland	Meder L	2935300	135	Other	19		
Ashland	Mineral L	2916900	225	Other	84	Other	6
Ashland	Moquah L	2918200	50	Other	3	Other	2
Ashland	Pelican L	2404800	46	Other	18	Other	2
Ashland	Potter L	2917200	29	Other	5		
Ashland	Spider L	2918600	103	Other	15	Other	4
Ashland	Spillerberg L	2936200	75	Other	29	Other	3
Ashland	Tea L	2922700	50	Other	19		
Ashland	Torrey L	2406700	29			Other	2
Ashland	Upper Clam L	2429600	166	Other	23	Other	5
Ashland	Zielke L	2406900	21	Other	8		
Barron	Bass L	1832800	118	Other	6		
Barron	Bear L	2105100	1358	1-2 Year Pe	105		
Barron	Beaver Dam L	2081200	1112	Other	24		
Barron	Big Dummy L	1835100	111	Other	16		
Barron	Big Moon L	2079000	191	Other	26	Other	6
Barron	Butternut L	2105800	141	Other	6		
Barron	Duck L	2100300	100	Other	38		
Barron	Echo L	2630200	161	Other	7		
Barron	Granite L	2100800	154	Other	58		
Barron	Hemlock L	2109800	357	Other	12		
Barron	Horseshoe L	2469800	115	Other	16		
Barron	Horseshoe L	2630100	377	Other	12		
Barron	L Chetek	2094000	770	Other	93		
Barron	L Montanis	2103200	200	Other	27		
Barron	Little Sand L	2661600	101			Other	4
Barron	Loon L	2478600	94	Other	14		
Barron	Lower Devils L	1864000	162	Other	61		
Barron	Lower Turtle L	2079700	276	Other	37		
Barron	Lower Vermillion	2098200	208	Other	28		
Barron	Minnow L	1866600	26	Other	2		
Barron	Mud L	2094600	577	Other	16		
Barron	Pokegama L	2094300	506	Other	183		
Barron	Poskin L	2098000	150	Other	21		
Barron	Prairie L	2094100	1534	Other	173		
Barron	Red Cedar L	2109600	1841	Other	204		
Barron	Rice L	2103900	939			1-2 Year Pe	27
Barron	Sand L	2661100	322	Other	11	Other	8
Barron	Scott L	2630700	81	Other	4		
Barron	Silver L	1881100	337	Other	124		
Barron	Spring L	1882800	60	Other	23		
Barron	Staples L	2631200	305	Other	11		
Barron	Tenmile L	2089500	376	Other	48		
Barron	Upper Devils L	2043500	86	Other	5		
Barron	Upper Turtle L	2079800	438	Other	56		
Bayfield	Armstrong L	2754600	48	Other	19		
Bayfield	Atkins L	2734000	176	1-2 Year Pe	22		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Bayfield	Bellevue L	2755800	65	Other	4		
Bayfield	Bladder L	2756200	81	Other	31		
Bayfield	Bony L	2742500	191	Other	71	Other	6
Bayfield	Buffalo L	1837700	179	Other	7	Other	5
Bayfield	Buskey Bay	2903800	100	Other	0	Other	4
Bayfield	Camp One L	2965700	37	Other	14		
Bayfield	Chippewa L	2431300	274			Other	7
Bayfield	Cisco L	2899200	95	Other	14		
Bayfield	Cranberry L	2732800	58	Other	3		
Bayfield	Crystal L	2874700	94	Other	5		
Bayfield	Crystal L	2897300	111	Other	42		
Bayfield	Deep L	2760100	125	Other	6		
Bayfield	Diamond L	2897100	341	1-2 Year Pe	62		
Bayfield	Drummond L	2899400	99	Other	14		
Bayfield	Eagle L	2902900	170			Other	5
Bayfield	Everett L	2761600	34	Other	2		
Bayfield	Finger L	2965500	76	Other	4		
Bayfield	Flynn L	2902800	29			Other	2
Bayfield	Ghost L	2423900	142			Other	5
Bayfield	Hammil L	2467900	83	Other	12		
Bayfield	Hart L	2903200	259	Other	0	Other	7
Bayfield	Hildur L	2902600	67			Other	3
Bayfield	Iron L	2877000	248	Other	9		
Bayfield	Jackson L	2734200	142	Other	6		
Bayfield	Kelly L	2472000	56	Other	3		
Bayfield	Kern L	2900500	91	Other	35		
Bayfield	L Knotting	2734700	80	Other	4		
Bayfield	L Millicent	2903700	183	Other	0	Other	6
Bayfield	L Owen	2900200	1323	Other	152		
Bayfield	L Ruth	2765900	66	Other	4		
Bayfield	L Tahkodah	2473500	152	Other	7		
Bayfield	Little Siskiwit L	2882200	37	Other	14		
Bayfield	Long L	2767100	263	Other	35		
Bayfield	Marengo L	2921100	99	Other	38		
Bayfield	Mccarry L	2903400	32			Other	2
Bayfield	Middle Eau Claire	2742100	902	Other	320	Other	15
Bayfield	Mill Pond L	2899700	62	Other	24		
Bayfield	Mullenhoff L	2876500	69	Other	4		
Bayfield	Muskellunge L	2903600	45	Other	3		
Bayfield	Namekagon L	2732600	3227	Other	1085	Other	34
Bayfield	Perch L	2770800	25	Other	10		
Bayfield	Pike L Treaty Cha	2902700	714	Other	255		
Bayfield	Samoset L	2494800	46	Other	3		
Bayfield	Siskiwit L	2882300	330	1-2 Year Pe	286		
Bayfield	Spider L	2774200	75	Other	4		
Bayfield	Spider L	2876200	124	Other	6		
Bayfield	Swett L	2743700	88	Other	34		
Bayfield	Trapper L	2734500	84	Other	32		
Bayfield	Twin Bear L	2903100	172	Other	0	Other	5
Bayfield	Upper Eau Claire	2742700	996	Other	351	Other	16
Burnett	Benoit L	2678300	279			Other	7
Burnett	Big Mckenzie L	2706800	1185	Other	137	Other	18
Burnett	Big Sand L	2676800	1400	Other	27		
Burnett	Big Trade L	2638700	304			Other	8
Burnett	Clam R Fl	2654500	359	Other	132		
Burnett	Danbury Fl	2674500	256			Other	7
Burnett	Des Moines L	2674200	229			Other	6
Burnett	Devils L	2461100	1001	Other	22		
Burnett	Dunham L	2651800	243	Other	33		
Burnett	Elbow L	2463100	233	Other	9		
Burnett	Fish L	2464500	356	Other	12		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Burnett	Lipsett L	2678100	393	Other	12		
Burnett	Little McGraw L	2477000	55	Other	8		
Burnett	Little Trade L	2639300	130			Other	4
Burnett	Little Yellow L	2674800	348	Other	128	Other	8
Burnett	Poquettes L	2491100	97	Other	14		
Burnett	Rice L	2677900	311			Other	8
Burnett	Rooney L	2493100	322	Other	42		
Burnett	Round L	2640100	204	Other	28		
Burnett	Sand L	2495100	962	1-2 Year Pe	36		
Burnett	Twenty-Six L	2672500	230			Other	6
Burnett	Yellow L	2675200	2287	1-2 Year Pe	807	Other	27
Chippewa	Axhandle L	2092500	84	Other	4		
Chippewa	Chippewa Falls Fl	2152600	282	Other	104		
Chippewa	Cornell Fl	2181400	577	Other	208	Other	12
Chippewa	Cornell L	2171000	194	Other	8		
Chippewa	Holcombe Fl	2184900	3890	Other	1297	Other	38
Chippewa	L Wissota	2152800	6300	1-2 Year Pe	1204	Other	51
Chippewa	Long L	2351400	1052	Other	370	Other	17
Chippewa	Old Abe L	2174700	1072	Other	377	Other	17
Chippewa	Otter L	2157000	661	Other	81		
Chippewa	Popple L	2173900	90	Other	13		
Chippewa	Round L	2169200	216	Other	8	Other	6
Chippewa	Town Line L	2172600	48	Other	3		
Clark	Mead L	2143900	320	Other	21	Other	4
Douglas	Amnicon L	2858100	426	1-2 Year Pe	12	Other	10
Douglas	Bass L	2451700	126	Other	48		
Douglas	Bear L	2857700	49	Other	19	Other	2
Douglas	Beauregard L	2452400	93	Other	36		
Douglas	Bond L	2693700	293	Other	108		
Douglas	Clear L	2457700	36	Other	14		
Douglas	Dowling L	2858300	154	Other	58	Other	5
Douglas	Hoodoo L	2763900	32	Other	2		
Douglas	L Minnesuing	2866200	432	Other	55		
Douglas	L Nebagamon	2865000	914	1-2 Year Pe	140		
Douglas	Leader L	2693800	165	Other	62		
Douglas	Lower Eau Claire	2741600	802	Other	285	Other	14
Douglas	Lund L	2480300	75	Other	4		
Douglas	Lyman L	2856400	403	Other	52	Other	9
Douglas	Person L	2488600	172	Other	7		
Douglas	Peterson L	2488700	33	Other	2		
Douglas	Red L	2492100	258	Other	9		
Douglas	Round L	2493900	34	Other	2		
Douglas	Upper St Croix L	2747300	855	1-2 Year Pe	227		
Douglas	Whitefish L	2694000	832	1-2 Year Pe	290		
Douglas	Wilson L	2600800	27	Other	2		
Dunn	Tainter L	2068000	1752	Other	604		
Eau Claire	Altoona L	2128100	840	Other	149	Other	7
Eau Claire	Dells Pond	2149900	739	Other	264	Other	13
Eau Claire	Halfmoon L	2125400	132	Other	19		
Eau Claire	L Eau Claire	2133200	860	Other	153	Other	7
Florence	Bass L	652500	50	Other	3		
Florence	Emily L	651600	191	Other	26		
Florence	Fay L	677100	282	Other	37		
Florence	Fisher L	704200	54	Other	3		
Florence	Halsey L	679300	512	Other	64		
Florence	Keyes L	672900	210	Other	28		
Florence	Long L	677400	340	Other	11		
Florence	Patten L	653700	255	Other	94		
Florence	Pine R Fl	651300	127	Other	48		
Florence	Sand L	591600	52	Other	3		
Florence	Sea Lion L	672300	125	Other	6		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Forest	Arbutus L	181400	158	Other	22		
Forest	Birch L	555500	468	Other	170		
Forest	Butternut L	692400	1292	1-2 Year Pe	354		
Forest	Crane L	388500	337	Other	44		
Forest	Crystal L	184200	63	1-2 Year Pe	33		
Forest	Franklin L	692900	892	1-2 Year Pe	80		
Forest	Ground Hemlock L	395900	88	Other	13		
Forest	Howell L	691800	177	Other	66		
Forest	Jungle L	377900	177	1-2 Year Pe	65		
Forest	King L	501700	33	Other	13		
Forest	L Lucerne	396500	1026	1-2 Year Pe	102		
Forest	L Metonga	394400	1991	Other	683		
Forest	Lily L	376900	213	1-2 Year Pe	150	Other	6
Forest	Little Long L	190500	102	Other	5		
Forest	Little Sand L	389700	229	Other	9		
Forest	Mole L	390600	73	Other	4		
Forest	Pine L	406900	1670	Other	187		
Forest	Quartz L	591000	47			Other	2
Forest	Range Line L	478200	82	1-2 Year Pe	43		
Forest	Riley L	557100	213			Other	6
Forest	Roberts L	378400	414	Other	53	Other	9
Forest	Silver L	555700	334	Other	11	Other	8
Forest	Stevens L	683000	297	1-2 Year Pe	65		
Forest	Trump L	479300	172	Other	24		
Forest	Van Zile L	608400	81	Other	31		
Forest	Wabikon L	556900	594			Other	12
Forest	Windfall L	373500	55			Other	3
Iron	Bearskull L	2265100	75	Other	11		
Iron	Big Pine L	2270700	632	Other	227	Other	12
Iron	Boot L	2297800	180	Other	7	Other	5
Iron	Catherine L	2309100	118	Other	6		
Iron	Cedar L	2309700	193	Other	26	Other	6
Iron	Charnley L	1840400	71	Other	4		
Iron	Clear L	2303700	67	Other	4	Other	3
Iron	Echo L	2301800	220	Other	30	Other	6
Iron	Fisher L	2307300	410	Other	52	Other	9
Iron	French L	1849600	92	Other	13	Other	4
Iron	Gile FI	2942300	3384	Other	1135	Other	35
Iron	Grand Portage L	2314100	144	Other	20	Other	5
Iron	Grant L	2312500	107	Other	5	Other	4
Iron	Hewitt L	2763300	78			Other	3
Iron	Island L	2945500	352	Other	129	Other	8
Iron	L Of The Falls	2298300	338	Other	44	Other	8
Iron	L Tahoe	2314000	37	Other	2	Other	2
Iron	Little Martha L	2314700	35	Other	2	Other	2
Iron	Long L	2303500	396	1-2 Year Pe	55	Other	9
Iron	Lower Springstead	2267000	95	Other	36	Other	4
Iron	Martha L	2314300	146	Other	55		
Iron	Mcdermott L	2296500	84	Other	12		
Iron	Mercer L	2313600	184	Other	25	Other	6
Iron	Moose L	2299300	269			Other	7
Iron	Mud L	2316400	56	Other	22		
Iron	Muskie L	2266800	81	Other	31	Other	3
Iron	N Bass L	1868900	180	Other	7	Other	5
Iron	Owl L	2307600	129	Other	18	Other	4
Iron	Oxbow L	2302300	80	Other	31	Other	3
Iron	Pardee L	2308000	206	Other	77	Other	6
Iron	Pike L	2299900	165	Other	62	Other	5
Iron	Pine L	2949200	312	1-2 Year Pe	238	Other	8
Iron	Plunkett L	2325200	48	Other	3		
Iron	Randall L	2318500	115	Other	44	Other	4

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Iron	Rice L	2300600	125	Other	47	Other	4
Iron	Sandy Beach L	2316100	111	Other	16		
Iron	Saxon Falls FI	2941100	41	Other	16	Other	2
Iron	Second Black L	2298600	60	Other	23		
Iron	Spider L	2306300	352	Other	129	Other	8
Iron	Stone L	2267200	82	Other	4	Other	3
Iron	Third Black L	2298800	68	Other	26		
Iron	Trude L	2295200	781	Other	278	Other	14
Iron	Turtle-Flambeau F	2294900	13545	Other	4255	Other	81
Iron	Upper Springstead	2267100	126	Other	48	Other	4
Iron	Virgin L	2304500	119			Other	4
Iron	Wilson L	2297000	162			Other	5
Langlade	Big Twin L	182200	60	Other	4		
Langlade	Deep Wood L	1445100	72			Other	3
Langlade	Duck L	981500	123	Other	6		
Langlade	Enterprise L	1579700	505	1-2 Year Pe	187	Other	11
Langlade	Greater Bass L	1445500	258			Other	7
Langlade	Jessie L	188700	35	Other	2		
Langlade	Lawrence L	997300	50	Other	3		
Langlade	Moccasin L	1005600	110	Other	5	Other	4
Langlade	Mueller L	194000	88	Other	5		
Langlade	Otter L	387200	83	Other	32		
Langlade	Pickrel L	388100	1256	Other	25		
Langlade	Rolling Stone L	389300	672	Other	17		
Langlade	Rose L	494200	112	1-2 Year Pe	15		
Langlade	Sawyer L	198100	149	1-2 Year Pe	25		
Langlade	Summit L	1445600	282	Other	10	Other	7
Langlade	Upper Post L	399200	757	Other	92		
Langlade	Water Power L	1445400	22			Other	1
Langlade	White L	365500	166	Other	7		
Lincoln	Alexander L	1494600	677	Other	242	Other	13
Lincoln	Bass L	969600	100	Other	5		
Lincoln	Clear L	1555400	272	Other	10		
Lincoln	Crystal L	979100	109	Other	5		
Lincoln	Deer L	1519600	156	Other	59	Other	5
Lincoln	Grandfather FI	1502400	350	Other	128		
Lincoln	Grandmother FI	1503000	562	Other	203		
Lincoln	Jersey City FI	1516000	404	1-2 Year Pe	304	Other	9
Lincoln	L Alice	1555900	1369	Other	477	Other	20
Lincoln	L Mohawksin	1515400	1910	Other	657	Other	24
Lincoln	L Nokomis	1516500	2433	Other	0	Other	28
Lincoln	Long L	1001000	132	Other	19		
Lincoln	Merrill FI	1481100	164	Other	62		
Lincoln	Muskellunge L	1555500	167	Other	7		
Lincoln	Pesabic L	1481600	146	Other	20		
Lincoln	Pine L	1012100	134	Other	19	Other	5
Lincoln	Rice R FI	1516400	920	Other	0	Other	15
Lincoln	Rice R FI. Treaty	1516401	3764	Other	1257		
Lincoln	Seven Island L	1490300	132	Other	50	Other	4
Lincoln	Silver L	1017400	82	Other	31		
Lincoln	Somo L	1547700	472	Other	60	Other	10
Lincoln	Spirit R FI	1506800	1664	Other	575	Other	22
Lincoln	Squaw L	1564400	79	Other	12	Other	3
Lincoln	Thompson L	1022200	30			Other	2
Lincoln	Tug L	1482400	151	Other	57	Other	5
Marathon	Big Eau Pleine Re	1427400	6830	Other	1775	Other	43
Marathon	L Wausau	1437500	1918	Other	66	Other	2
Marathon	Lost L	1407000	42	Other	3		
Marathon	Mayflower L	310500	98	Other	14		
Marathon	Mission L	1005400	107			Other	4
Marathon	Mud L	193800	70	Other	4		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Marathon	Norrie L	310100	99	Other	5		
Marathon	Pike L	1406300	205	Other	28		
Marathon	Wausau Dam L	1469700	284	Other	8		
Marinette	Big Newton L	498800	68	Other	26		
Marinette	Caldron Falls Res	545400	1018	Other	22	Other	16
Marinette	Eagle L	500200	56	Other	3		
Marinette	High Falls Reserv	540600	1498	Other	170		
Marinette	Hilbert L	501200	247	Other	33		
Marinette	Johnson Falls Fl	533300	68	Other	26		
Marinette	Little Newton L	502300	60	Other	23		
Marinette	Oneonta L	503300	66	Other	4		
Marinette	Sandstone Fl	531300	153	Other	29		
Marinette	Thunder L	533600	127	Other	6		
Oconto	Archibald L	417400	393	Other	50	Other	9
Oconto	Bass L	417900	142	Other	20		
Oconto	Bear L	471200	78	Other	4		
Oconto	Boot L	418700	235	Other	87	Other	7
Oconto	Chain L	464700	81	Other	4		
Oconto	Crooked L	462000	143	Other	6		
Oconto	Horn L	467100	132	Other	6		
Oconto	John L	470600	104	Other	5		
Oconto	Maiden L	487500	290	Other	38		
Oconto	Munger L	470900	97	Other	5	Other	4
Oconto	Reservoir Pond	466700	417	Other	13		
Oconto	Shay L	427300	50	Other	3		
Oconto	Surprise L	428100	70	Other	4		
Oconto	Townsend Fl	465000	476	Other	14		
Oconto	Waubee L	439500	124	Other	6		
Oconto	Wheeler L	439800	293	Other	108		
Oneida	Aldridge L	967400	134	Other	51		
Oneida	Alva L	968100	201	Other	75		
Oneida	Baker L	1546000	42	Other	16		
Oneida	Bass L	970000	74	Other	4		
Oneida	Bass L	1580300	124	Other	47	Other	4
Oneida	Bear L	1527800	312	Other	41		
Oneida	Bearskin L	1523600	400	1-2 Year Pe	512	Other	9
Oneida	Big Carr L	971600	213	Other	29	Other	6
Oneida	Big Fork L	1610700	690	1-2 Year Pe	351	Other	13
Oneida	Big L	1613000	865	1-2 Year Pe	256	Other	15
Oneida	Big Stone L	1612200	548	1-2 Year Pe	125	Other	11
Oneida	Birch L	1523800	180	Other	67		
Oneida	Bird L	972000	99	Other	38		
Oneida	Blue L	1538600	456	Other	166		
Oneida	Bolger L	973000	119	1-2 Year Pe	78		
Oneida	Boom L	1580200	437	Other	13	Other	10
Oneida	Booth L	1537800	207	Other	28	Other	6
Oneida	Bridge L	1516800	411	Other	0	Other	9
Oneida	Brown L	973700	98	Other	5		
Oneida	Buckskin L	2272600	634	Other	159	Other	9
Oneida	Buffalo L	974200	104	Other	40		
Oneida	Burrows L	975000	156	Other	7	Other	5
Oneida	Carrol L	1544800	352	Other	46	Other	8
Oneida	Chain L	1598000	219	Other	82	Other	6
Oneida	Clear L	977100	36	Other	2		
Oneida	Clear L	977200	30	Other	12	Other	2
Oneida	Clear L	977400	62	Other	24	Other	3
Oneida	Clear L	977500	846	Other	300	Other	15
Oneida	Clear L	2272555	212	Other	77	Other	6
Oneida	Clearwater L	1616400	351	Other	129	Other	8
Oneida	Columbus L	1616900	670	Other	240		
Oneida	Crescent L	1564200	612	1-2 Year Pe	646	Other	12

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	Crooked L	1613300	176	Other	7		
Oneida	Cunard L	1590000	43	Other	17		
Oneida	Currie L	979300	96	Other	37		
Oneida	Dam L	1596900	744	Other	265	Other	14
Oneida	Deer L	1612300	177	Other	66	Other	5
Oneida	Diamond L	1537100	124	Other	47	Other	4
Oneida	Dog L	1590200	37	Other	2		
Oneida	Dog L	1612900	216	Other	80	Other	6
Oneida	E Horsehead L	1523000	184	Other	25	Other	6
Oneida	Echo L	1597800	107	Other	41	Other	4
Oneida	Fifth L	1571100	240	Other	89	Other	7
Oneida	Fish L	1570600	70	Other	27	Other	3
Oneida	Fourmile L	1610800	218	1-2 Year Pe	111	Other	6
Oneida	Fourth L	1572000	258	Other	96	Other	7
Oneida	Franklin L	986000	161	Other	22	Other	5
Oneida	Fuller L	2272000	101	Other	5		
Oneida	Garth L	986600	114	Other	43		
Oneida	George L	1569600	435	1-2 Year Pe	214	Other	10
Oneida	Gilmore L	1589300	320	Other	42	Other	8
Oneida	Hancock L	1517900	259	Other	10	Other	7
Oneida	Hasbrook L	1589100	302	Other	111	Other	8
Oneida	Hat Rapids FI	1567325	650	Other	233		
Oneida	Hemlock L	989200	39	Other	15		
Oneida	Hill L	990200	30	Other	2		
Oneida	Hixon L	1568900	50	Other	3		
Oneida	Hodstradt L	990700	126	Other	6		
Oneida	Indian L	1598900	397	Other	145		
Oneida	Island L	1610500	295	Other	109	Other	8
Oneida	Jennie Webber L	1574300	226	Other	9		
Oneida	Julia L (Three La	1614300	401	Other	146	Other	9
Oneida	Kate Pier L	1586300	34	Other	13		
Oneida	Kathan L	1598300	189	Other	71		
Oneida	Katherine L	1543300	590	1-2 Year Pe	427	Other	12
Oneida	Kawaguesaga L	1542300	670	1-2 Year Pe	124	Other	13
Oneida	Killarney L	1520900	421	Other	13		
Oneida	L Creek	1580500	172	Other	65	Other	5
Oneida	L Julia (Rhinelan	995000	238	Other	32	Other	7
Oneida	L Seventeen	996100	172	Other	24		
Oneida	L Thompson	1569900	382	Other	49	Other	9
Oneida	Laurel L	1611800	232	1-2 Year Pe	81	Other	6
Oneida	Little Bearskin L	1523500	164	Other	7		
Oneida	Little Carr L	998800	52	Other	3		
Oneida	Little Fork L	1610600	354	1-2 Year Pe	297	Other	8
Oneida	Little Tomahawk L	1543900	160	Other	0	Other	5
Oneida	Lone Stone L	1605600	172			Other	5
Oneida	Long L	1001300	113	Other	43	Other	4
Oneida	Long L	1609000	620	1-2 Year Pe	239	Other	12
Oneida	Long L	1618300	56	Other	22	Other	3
Oneida	Lost L	1575100	155	Other	58		
Oneida	Lower Kaubashine	1534800	187	Other	26	Other	6
Oneida	Lumen L	1002800	49	Other	19		
Oneida	Madeline L	1544700	159			Other	5
Oneida	Manson L	1517200	236	Other	88	Other	7
Oneida	Maple L	1609900	144	Other	6		
Oneida	Margaret L	1615900	88	Other	34		
Oneida	Mars L	1577100	41	Other	16		
Oneida	Mccormick L	1526600	118	Other	17		
Oneida	Medicine L	1611700	372	1-2 Year Pe	130	Other	9
Oneida	Mercer L	1538900	257	Other	95	Other	7
Oneida	Mid L	1542600	215	Other	8	Other	6
Oneida	Mildred L	1004600	191	Other	8		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	Minocqua L	1542400	1360	1-2 Year Pe	187	Other	20
Oneida	Moccasin L	1612100	95	Other	36	Other	4
Oneida	Moen L	1573800	460	Other	58	Other	10
Oneida	Mud L	1544000	41	Other	16		
Oneida	Mud L	1612500	124	Other	6	Other	4
Oneida	Muskellunge L	1595600	284	Other	105	Other	7
Oneida	Muskie L	1524300	43	Other	3		
Oneida	N Nokomis L	1595800	476	Other	60	Other	10
Oneida	N Two L	1007500	146	Other	55		
Oneida	Nose L	1008200	40	Other	3		
Oneida	Oatmeal L	1597300	97	Other	5		
Oneida	Oneida L	1518200	255	Other	94	Other	7
Oneida	Paradise L	1009400	89	Other	5		
Oneida	Pelican L	1579900	3585	Other	1199	Other	36
Oneida	Pickrel L	1590400	736	Other	18	Other	13
Oneida	Pier L	1529700	257	Other	34		
Oneida	Pine L	1012200	203	Other	76		
Oneida	Pine L	1581700	240	Other	89	Other	7
Oneida	Planting Ground L	1609100	1012	1-2 Year Pe	295	Other	16
Oneida	Prairie L	1013000	58	Other	22		
Oneida	Rainbow Fl	1595300	2035	Other	698	Other	25
Oneida	Range Line L	1610300	123	Other	47	Other	4
Oneida	Rhineland Fl	1580100	1326	Other	463	Other	19
Oneida	Rocky Run Fl	1525500	96	Other	37		
Oneida	Round L	1610400	150	Other	57	Other	5
Oneida	S Blue L	1015100	80	Other	4		
Oneida	S Pine L	1580700	77	Other	30		
Oneida	S Two L	1015500	214	Other	80		
Oneida	Sand L	1597000	540	Other	195	Other	11
Oneida	Second L	1572300	111	Other	42	Other	4
Oneida	Sevenmile L	1605800	503	Other	63	Other	11
Oneida	Shepard L	1576100	179	Other	7	Other	5
Oneida	Shishebogama L	1539600	716	Other	44	Other	7
Oneida	Skunk L	1533200	130	Other	49		
Oneida	Soo L	1018900	135	Other	51	Other	5
Oneida	Spider L	1586600	118	1-2 Year Pe	50	Other	4
Oneida	Spirit L	1612000	368	Other	135	Other	9
Oneida	Squash L	1019500	396	Other	145		
Oneida	Squirrel L	1536300	1317	1-2 Year Pe	740	1-2 Year Pe	11
Oneida	Stella L	1575700	405	Other	13	Other	9
Oneida	Stone L	1597600	188			Other	6
Oneida	Stone L	2272700	248	Other	92		
Oneida	Sunday L	1020600	88	Other	5		
Oneida	Sunset L	1572500	33	Other	13	Other	2
Oneida	Swamp L	1522400	296	Other	10		
Oneida	Swamsauger L	1528700	141	Other	53		
Oneida	Sweeney L	1589600	187	Other	70	Other	6
Oneida	Tamarack L	1582200	99	Other	38		
Oneida	Third L	1572200	103	Other	39	Other	4
Oneida	Thunder L	1580400	172	Other	65	Other	5
Oneida	Thunder L	1618100	1768	1-2 Year Pe	167		
Oneida	Tim Lynn L	1597400	84	Other	32		
Oneida	Tom Doyle L	1586800	102	Other	15	Other	4
Oneida	Tomahawk L	1542700	3392	1-2 Year Pe	0	Other	35
Oneida	Tomahawk Treaty C	1542701	3552	Other	368		
Oneida	Townline L	1609600	152	Other	57	Other	5
Oneida	Turtle L	1587400	53	Other	3		
Oneida	Two Sisters L	1588200	719	1-2 Year Pe	230	1-2 Year Pe	5
Oneida	Upper Kaubashine	1535000	190	Other	71	Other	6
Oneida	Venus L	1577000	65	Other	25		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	Virgin L	1614100	276	Other	102	Other	7
Oneida	W Horsehead L	1522900	145			Other	5
Oneida	Walters L	1582800	61	Other	24		
Oneida	Whitefish L	1613500	205	Other	8	Other	6
Oneida	Wildwood L	1178600	28	Other	4		
Oneida	Willow FI	1528300	5135	Other	1690	Other	45
Oneida	Willow L	1529500	395	Other	13	Other	9
Polk	Apple R FI	2624200	639			Other	12
Polk	Balsam L	2620600	2054	1-2 Year Pe	82		
Polk	Bear L	2452200	155	Other	58		
Polk	Bear Trap L	2618100	241	Other	9	Other	7
Polk	Big Butternut L	2641000	378	Other	49		
Polk	Big L	2615900	259	Other	10		
Polk	Big Round L	2627400	1015	Other	119		
Polk	Bone L	2628100	1781			Other	23
Polk	Church Pine L	2616100	107	Other	5		
Polk	Clear L	2623500	30	Other	2		
Polk	Deer L	2619400	807			Other	14
Polk	Half Moon L	2621100	579	Other	16		
Polk	Indianhead FI	2634400	776	Other	276		
Polk	Little Butternut	2640700	189	Other	8		
Polk	Magnor L	2624600	231	Other	31		
Polk	N Pipe L	2485700	58	1-2 Year Pe	12		
Polk	N Twin L	2623900	135	Other	6		
Polk	Pike L	2624000	159	Other	7		
Polk	Pipe L	2490500	284	1-2 Year Pe	28		
Polk	Sand L	2495000	187	Other	8		
Polk	Wapogasset L	2618000	1186	Other	137	Other	18
Polk	Ward L	2599400	91	Other	13		
Polk	Wind L	2616000	38	Other	3		
Portage	Tree L	289400	74	Other	4		
Price	Amik L	2268600	224			Other	6
Price	Bass L	2279800	84	Other	4		
Price	Bass L	2282200	58	Other	22	Other	3
Price	Big Dardis L	2244200	144	Other	20	Other	5
Price	Blockhouse L	2256800	242	Other	9		
Price	Butternut L	2283300	1006	1-2 Year Pe	766	Other	16
Price	Cochram L	2264000	111	Other	5		
Price	Crane + Chase L	2237500	86	Other	33	Other	3
Price	Crowley FI	2287200	422	Other	13	Other	9
Price	Deer L	2239100	145			Other	5
Price	Duroy L	2240100	379	Other	139	Other	9
Price	Elk L	2240000	88	Other	34	Other	3
Price	Grassy L	2238100	81	Other	31	Other	3
Price	Lac Sault Dore	2236800	561	Other	202	Other	11
Price	Long L	2239300	418	Other	152	Other	9
Price	Long L	2282000	241	Other	89	Other	7
Price	Lower Park Falls	2290100	71	Other	27	Other	3
Price	Miles L	2271100	32			Other	2
Price	Musser L	2245100	563	Other	70	Other	11
Price	N Spirit L	1515200	213	Other	29	Other	6
Price	Patterson L	1872500	70	Other	4		
Price	Pike L	2268300	806	Other	287	Other	14
Price	Pixley FI	2288900	334	Other	123	Other	8
Price	Round L	2267800	726	Other	259	Other	13
Price	Schnur L	2284000	158	Other	59	Other	5
Price	Solberg L	2242500	859	Other	305	Other	15
Price	Spirit L	1513000	126	Other	6	Other	4
Price	Stone L	1513800	79	Other	4		
Price	Thompson L	2265900	111	Other	5	Other	4
Price	Turner L	2268500	149	Other	7	Other	5

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Price	Upper Park Falls	2290500	431			Other	10
Price	Upper Price L	2235300	43			Other	2
Price	Whitcomb L	2266100	44	Other	7	Other	2
Price	Wilson L	2239400	351	Other	129	Other	8
Price	Worcester L	2210900	100	Other	38		
Rusk	Amacoy L	2359700	278	Other	37	Other	7
Rusk	Audie L	2368700	128			Other	4
Rusk	Bass L	2090900	88	Other	5		
Rusk	Big Falls Fl	2230100	369	Other	135	Other	9
Rusk	Chain L	2350500	468	Other	59	Other	10
Rusk	Clear L	2350600	95	Other	14	Other	4
Rusk	Dairyland Reservo	2229200	1745	Other	602	Other	23
Rusk	Fireside Lakes	2349500	302	Other	111		
Rusk	Island L	2350200	526	Other	66	Other	11
Rusk	Ladysmith Fl	2228700	288	Other	106	Other	7
Rusk	Mccann L	2350400	133	Other	19	Other	5
Rusk	Perch L	2368500	23			Other	1
Rusk	Potato L	2355300	534	Other	67	Other	11
Rusk	Pulaski L	1875900	126	Other	18		
Rusk	Sand L	2353600	262	Other	35	Other	7
Rusk	Thornapple Fl	2227500	268	Other	99	Other	7
Sawyer	Barber L	2382300	238	Other	32	Other	7
Sawyer	Barker L	2400000	238	Other	88	Other	7
Sawyer	Bennett L	1834800	37	Other	2		
Sawyer	Beverly L	2387200	9			Other	1
Sawyer	Black Dan L	2381900	128	Other	6	Other	4
Sawyer	Black L	2401300	129	Other	6	Other	4
Sawyer	Blaisdell L	2402200	356	Other	46	Other	8
Sawyer	Blue Gill L	1835600	26	Other	2		
Sawyer	Boos L	2425000	37	Other	14	Other	2
Sawyer	Burns L	2436400	37	Other	2	Other	2
Sawyer	Callahan L	2434700	106			Other	4
Sawyer	Clear L	1841300	77			Other	3
Sawyer	Connors L	2275100	429	Other	156	Other	10
Sawyer	Durphee L	2396800	193	Other	26		
Sawyer	Evergreen L	2277600	200	1-2 Year Pe	112	Other	6
Sawyer	Fawn L	2435900	23	Other	2	Other	1
Sawyer	Fishtrap L	2401100	216	Other	8	Other	6
Sawyer	Ghost L	2423000	372	1-2 Year Pe	113	Other	9
Sawyer	Grimh Fl	2385100	86			Other	3
Sawyer	Grindstone L	2391200	3111	1-2 Year Pe	519	Other	16
Sawyer	Ham L	1852300	100	Other	38		
Sawyer	Hayward L	2725500	247	Other	33	Other	7
Sawyer	Holmes L	2419600	62			Other	3
Sawyer	Hunter L	2400600	126	Other	48	Other	4
Sawyer	Island L	2381800	67	Other	4	Other	3
Sawyer	L Chetac	2113300	1920	1-2 Year Pe	262		
Sawyer	L Chippewa	2399700	15300	Other	3177	Other	58
Sawyer	L Of The Pines	2275300	273	Other	101	Other	7
Sawyer	L Placid	2436500	160	Other	22	Other	5
Sawyer	L Winter	2381100	676	Other	18	Other	13
Sawyer	Lac Courte Oreill	2390800	5039	Other	1084	Other	29
Sawyer	Lewis L	1860200	52	Other	3		
Sawyer	Little Round L	2395500	229	Other	7		
Sawyer	Little Sissabagam	2394100	299			Other	8
Sawyer	Loretta L	2382700	126			Other	4
Sawyer	Lost Land L	2418600	1304	Other	150	Other	19
Sawyer	Lovejoy L	2395900	76	Other	29		
Sawyer	Lower Clam L	2429300	203	Other	28	Other	6
Sawyer	Mason L	2277200	190	1-2 Year Pe	137	Other	6
Sawyer	Meadow L	2424800	39	Other	15	Other	2

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Sawyer	Mirror L	1866900	38	Other	3		
Sawyer	Moose L	2420600	1670	Other	577	Other	22
Sawyer	Mud L	2434800	480	Other	14	Other	10
Sawyer	Nelson L	2704200	2503	1-2 Year Pe	392		
Sawyer	North L	2436000	129	Other	6	Other	4
Sawyer	Osprey	2395100	208	Other	14		
Sawyer	Partridge Crop L	2424600	45	Other	18	Other	2
Sawyer	Perch L	1873600	129	Other	18	Other	4
Sawyer	Radisson Fl	2397400	255	Other	94	Other	7
Sawyer	Round L	2395600	3054	1-2 Year Pe	527	Other	33
Sawyer	Sand L	2393200	928	Other	328	Other	16
Sawyer	Sissabagama L	2393500	719	1-2 Year Pe	167	Other	13
Sawyer	Smith L	2726100	323	Other	11		
Sawyer	Spider L	2435700	1454	Other	165	Other	21
Sawyer	Spring L	2724900	220	Other	8		
Sawyer	Teal L	2417000	1049	Other	369	Other	17
Sawyer	Teal R Fl	2416900	75	Other	29	Other	3
Sawyer	Tiger Cat Fl	2435000	819	Other	98	Other	14
Sawyer	Whitefish L	2392000	786	Other	95	Other	14
Sawyer	Windfall L	2046500	102	Other	39		
Sawyer	Windigo L	2046600	522	Other	189		
St. Croix	Cedar L	2615100	1100	Other	387	Other	17
Taylor	Anderson L	2165700	43	Other	3		
Taylor	Chelsea L	2200400	59	Other	3		
Taylor	Chequamegon Water	2160700	2714	Other	40		
Taylor	Diamond L	1757200	49	Other	19		
Taylor	Esadore L	1764000	46	Other	3		
Taylor	Hulls L	1762700	67	Other	4		
Taylor	James L	1468900	50	Other	3		
Taylor	Kathryn L	2166100	62	Other	9		
Taylor	Mondeaux Fl	2193300	416	Other	13	Other	9
Taylor	N Harper L	2204000	54	Other	21	Other	3
Taylor	Rib L	1469100	320	1-2 Year Pe	31	Other	8
Taylor	Richter L	1760000	45	Other	3		
Taylor	S Harper L	2204100	80	Other	12		
Taylor	Sackett L	1764500	63	Other	9		
Taylor	Shearer L	2197600	21	Other	2		
Taylor	Wellington L	1467800	43	Other	3		
Vilas	Alder L	2329600	274	Other	101	Other	7
Vilas	Allequash L	2332400	426	Other	54	Other	10
Vilas	Alma L	967900	55	Other	8	Other	3
Vilas	Annabelle L	2953800	213	1-2 Year Pe	183	Other	6
Vilas	Anvil L	968800	398	1-2 Year Pe	155		
Vilas	Apeekwa L	2269400	188	Other	70	Other	6
Vilas	Armour L	2953200	320	Other	118	Other	8
Vilas	Arrowhead L	1541500	99	Other	14	Other	4
Vilas	Averill L	2956700	71	Other	0	Other	3
Vilas	Ballard L	2340700	505	Other	183	Other	11
Vilas	Bass L	1604200	266	Other	10	Other	7
Vilas	Bear L	2335400	76	Other	4	Other	3
Vilas	Beaver L	2960600	68	Other	4		
Vilas	Belle L	2955700	53	Other	21	Other	2
Vilas	Benson L	2327100	28	Other	11	Other	2
Vilas	Big Arbor Vitae L	1545600	1090	1-2 Year Pe	953	Other	17
Vilas	Big Crooked L	2338800	682	Other	244	Other	13
Vilas	Big Donahue L	971700	92	Other	5		
Vilas	Big Gibson L	1835200	116	Other	44	Other	4
Vilas	Big Hurst L	2756000	48	Other	3		
Vilas	Big Kitten L	2336700	55	Other	3	Other	3
Vilas	Big L (Boulder Jc	2334700	835	Other	297	Other	15

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Vilas	Big L (Mi Border)	2963800	771	1-2 Year Pe	716	Other	11
Vilas	Big Muskellunge L	1835300	930	Other	329	Other	16
Vilas	Big Portage L	1629500	638	Other	229		
Vilas	Big Sand L	1602600	1418	Other	161	Other	20
Vilas	Big St Germain L	1591100	1617	Other	560	Other	22
Vilas	Bills L	1835500	37	Other	0	Other	0
Vilas	Birch L	2311100	528	Other	191	Other	11
Vilas	Black Oak L	1630100	584	Other	16		
Vilas	Boot L	1619100	284	Other	10	Other	7
Vilas	Boot L	2756400	29	Other	2	Other	2
Vilas	Boulder L	2338300	524	Other	189	Other	11
Vilas	Brandy L	1541300	110	Other	5	Other	4
Vilas	Carpenter L	976100	333	Other	43		
Vilas	Catfish L	1603700	1012	Other	357	Other	16
Vilas	Circle Lily L	2326700	223	Other	30	Other	6
Vilas	Clear L	2329000	555	Other	200	Other	11
Vilas	Cleveland L	2758600	32	Other	2		
Vilas	Cochran L	2963500	126	Other	6	Other	4
Vilas	Crab L	2953500	949	Other	336	Other	16
Vilas	Crampton L	2759000	59	Other	3		
Vilas	Cranberry L	1603800	956	Other	338	Other	16
Vilas	Crystal L	1842400	88	Other	5		
Vilas	Dead Pike L	2316600	297	1-2 Year Pe	24	Other	8
Vilas	Deer L	980600	65	Other	4		
Vilas	Deer L	2311500	37	Other	2		
Vilas	Deerskin L	1601300	309	Other	41	Other	8
Vilas	Diamond L	1844700	122	Other	6	Other	4
Vilas	Dorothy Dunn L	1845600	70	Other	4	Other	3
Vilas	Duck L	1599900	108	Other	41	Other	4
Vilas	E Ellerson L	2331300	136	Other	51	Other	5
Vilas	E Witches L	982500	34	Other	2		
Vilas	Eagle L	1600200	572	Other	206	Other	11
Vilas	Eleanore L	1631500	28	Other	11	Other	2
Vilas	Erickson L	983600	106	Other	15		
Vilas	Escanaba L	2339900	293	1-2 Year Pe	426	1-2 Year Pe	7
Vilas	Fawn L	1591000	22	Other	9	Other	1
Vilas	Fawn L	2328900	74	Other	28	Other	3
Vilas	Finger L	984700	90	Other	13		
Vilas	Fishtrap L	2343200	329	Other	121	Other	8
Vilas	Forest L	2762200	466	Other	169		
Vilas	Found L	1593800	326	Other	43	Other	8
Vilas	Frank L	985900	141	Other	6		
Vilas	Harmony L	988300	88	Other	5		
Vilas	Harris L	2958500	507	Other	183	Other	11
Vilas	Helen L	2964400	111	Other	42	Other	4
Vilas	Hiawatha L	2328400	36	Other	2		
Vilas	High L	2344000	734	Other	262	Other	13
Vilas	Horsehead L	2953100	234	Other	87	Other	6
Vilas	Hunter L	991700	184	Other	25		
Vilas	Imogene L	586800	66	Other	4		
Vilas	Indian L	2764400	68			Other	3
Vilas	Irving L	2340900	403	Other	13	Other	9
Vilas	Island L	2334400	1023	Other	361	Other	17
Vilas	Jag L	1855900	158	Other	59	Other	5
Vilas	Jenny L	1856400	59	Other	23		
Vilas	Johnson L	1541100	78	Other	4	Other	3
Vilas	Jute L	1857400	194			Other	6
Vilas	Katinka L	2957000	172	Other	65		
Vilas	Kentuck L	716800	957	1-2 Year Pe	297	1-2 Year Pe	45
Vilas	Kenu L	1629800	73	Other	4		
Vilas	Kildare L	1631700	54	Other	3	Other	3

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Vilas	L Content	1592000	244	Other	91	Other	7
Vilas	L Laura	995200	599	Other	215	Other	12
Vilas	Lac Des Fleurs	1630900	49	Other	3		
Vilas	Lac Vieux Desert	1631900	4300	Other	282	Other	26
Vilas	Little Arbor Vita	1545300	534	Other	67	Other	11
Vilas	Little Crooked L	2335500	153	Other	7	Other	5
Vilas	Little Horsehead	2953000	52	Other	20		
Vilas	Little John L	2332300	166	Other	62	Other	5
Vilas	Little Papoose L	2328200	46	Other	3	Other	2
Vilas	Little Portage L	1629200	170	Other	64	Other	5
Vilas	Little Presque Is	2959700	85	Other	4	Other	3
Vilas	Little Rice L	2338900	59	Other	3	Other	3
Vilas	Little Spider L	1540400	235	Other	32	Other	7
Vilas	Little St Germain	1596300	980	1-2 Year Pe	371	Other	16
Vilas	Little Star L	2334300	244	Other	91	Other	7
Vilas	Little Trout L	2321600	978	Other	104	Other	5
Vilas	Lone Pine L	2961600	142	Other	6	Other	5
Vilas	Long L	1602300	872	Other	104	Other	15
Vilas	Loon L	1001600	31	Other	2		
Vilas	Lost Canoe L	2339800	249	Other	92		
Vilas	Lost L	1593400	544	Other	68	Other	11
Vilas	Lower Aimer L	2955000	34	Other	2		
Vilas	Lower Buckatabon	1621000	352	Other	12	Other	8
Vilas	Lower Gresham L	2330300	149			Other	5
Vilas	Lynx L	1600000	22	Other	9	Other	1
Vilas	Lynx L	2954500	339	Other	124	Other	8
Vilas	Mamie L	2964100	400	1-2 Year Pe	455	Other	9
Vilas	Manitowish L	2329400	506	Other	183	Other	11
Vilas	Marshall L	1626600	87	Other	5	Other	3
Vilas	Mccullough L	2960400	216	Other	8	Other	6
Vilas	Mermaid L	2768100	60	Other	9		
Vilas	Meta L	1004400	175	Other	7		
Vilas	Middle Ellerson L	1866100	60			Other	1
Vilas	Middle Gresham L	2330700	53	Other	3	Other	2
Vilas	Moccasin L	1005700	83	Other	12	Other	3
Vilas	Moon L	1005800	131	Other	18	Other	4
Vilas	Morton L	2960300	163	Other	7	Other	5
Vilas	Murphy L	2769700	81	Other	4	Other	3
Vilas	Muskellunge L	1596600	272	Other	36	Other	7
Vilas	N Crab L	2953400	56	Other	22	Other	3
Vilas	N Turtle L	2310400	369	Other	135	Other	9
Vilas	N Twin L	1623800	2788	Other	0	Other	31
Vilas	Nelson L	1007600	104	Other	5	Other	4
Vilas	Nelson L	1869900	27			Other	2
Vilas	Nixon L	2341200	110	Other	5	Other	4
Vilas	No Mans L	2312100	225	Other	84	Other	6
Vilas	Norwood L	1008100	125	Other	12		
Vilas	Oswego L	1871800	66			Other	3
Vilas	Otter L	1600100	196	Other	73	Other	6
Vilas	Oxbow L	2954800	511	1-2 Year Pe	306	Other	11
Vilas	Pallette L	1872100	173			Other	5
Vilas	Palmer L	2962900	635	Other	78	Other	12
Vilas	Papoose L	2328700	428	Other	156	Other	10
Vilas	Partridge L	2341500	228	Other	9	Other	6
Vilas	Pickarel L	1619700	293	1-2 Year Pe	25	Other	7
Vilas	Pine Island L	1011900	79	Other	4	Other	3
Vilas	Pioneer L	1623400	427	Other	54	Other	10
Vilas	Plum L	1592400	1033	1-2 Year Pe	416	Other	17
Vilas	Plum L	2963200	225	Other	9		
Vilas	Presque Is. Treat	2956501	1571	Other	544		
Vilas	Presque Isle L	2956500	1280	Other	0	Other	19

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Vilas	Rainbow L	2310800	146	Other	55	Other	5
Vilas	Razorback L	1013800	362	1-2 Year Pe	356	Other	9
Vilas	Rest L	2327500	608	Other	219	Other	12
Vilas	Rice L	1618600	71	Other	27	Other	3
Vilas	Roach L	1014000	51	Other	20	Other	2
Vilas	Roach L	2772500	125	Other	2		
Vilas	Rock L	2311700	122	Other	46	Other	4
Vilas	Rosalind L	1877900	43			Other	2
Vilas	Round L	2334900	116	Other	6	Other	4
Vilas	Rudolph L	2954300	79			Other	3
Vilas	Rush L	2343600	44	Other	17	Other	2
Vilas	S Turtle L	2310200	454	Other	165	Other	10
Vilas	S Twin L	1623700	642	Other	0	Other	12
Vilas	Sanford L	2335300	88	Other	34	Other	3
Vilas	Scattering Rice L	1600300	267	Other	99	Other	7
Vilas	Sherman L	1880700	123	1-2 Year Pe	60	Other	4
Vilas	Smoky L	1018300	610			Other	0
Vilas	Snipe L	1018500	239	1-2 Year Pe	320	Other	7
Vilas	Sparkling L	1881900	154	Other	21	Other	5
Vilas	Spectacle L	717400	171	Other	7		
Vilas	Spider L	2329300	272	Other	101	Other	7
Vilas	Spring L	2964800	205	Other	76		
Vilas	Squaw L	2271600	785	1-2 Year Pe	301	Other	14
Vilas	Star L	1593100	1206	Other	422	Other	18
Vilas	Stateline L	2952100	199	Other	2		
Vilas	Stewart L	1020000	39	Other	15		
Vilas	Stone L	2328800	139	Other	52	Other	5
Vilas	Sturgeon L	2327200	32	Other	13	Other	2
Vilas	Sumach L	1020500	60	Other	4	Other	3
Vilas	Sunset L	1020900	185	Other	8	Other	6
Vilas	Tenderfoot L	2962400	437	1-2 Year Pe	250	Other	8
Vilas	Towanda L	1022900	146	Other	20	Other	5
Vilas	Trout L	2331600	3816	Other	392	Other	38
Vilas	Twin Island L	2959300	205	Other	8	Other	6
Vilas	Twin L Treaty Cha	1623801	3430	Other	1150		
Vilas	Upper Aimer L	2955100	33	Other	2		
Vilas	Upper Buckatabon	1621800	494	Other	14	Other	10
Vilas	Upper Gresham L	2330800	366	Other	47	Other	9
Vilas	Van Vliet L	2956800	220	Other	0	Other	6
Vilas	Vance L	2327300	30	Other	12	Other	2
Vilas	Verna L	1540300	77			Other	3
Vilas	Voyageur L	1603400	130	Other	49	Other	4
Vilas	W Bay L	2964000	368	1-2 Year Pe	149	Other	4
Vilas	W Plum L	1592500	75	Other	29	Other	3
Vilas	W Witches L	1177500	30	Other	2		
Vilas	Watersmeet L	1599400	100	Other	38	Other	4
Vilas	White Birch L	2340500	112	Other	43	Other	4
Vilas	White Sand L	2339100	734	Other	89	Other	13
Vilas	Wild Rice L	2329800	379	Other	111	Other	7
Vilas	Wildcat L	2336800	305	Other	40	Other	8
Vilas	Wolf L	2336100	393	Other	144	Other	9
Vilas	Yellow Birch L	1599600	202	Other	75	Other	6
Washburn	Balsam L	2112800	295	Other	109		
Washburn	Bass L	1833300	130	Other	49		
Washburn	Bass L	2451300	144	Other	6		
Washburn	Bass L	2451900	188	1-2 Year Pe	130	Other	6
Washburn	Bean L	2718500	100	Other	5		
Washburn	Beartrack North L	3000351	33	Other	13		
Washburn	Beartrack South L	2452300	65	Other	25		
Washburn	Big Bass L	2453300	203	Other	28		
Washburn	Birch L	2113000	368	Other	48		

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Washburn	Cable L	2456100	185	Other	25		
Washburn	Chippanazie L	2722800	58	Other	22		
Washburn	Colton FI	2702100	58	Other	22		
Washburn	Deep L	1844000	43	Other	17		
Washburn	Dunn L	2709800	193	Other	72		
Washburn	Gilmore L	2695800	389	Other	12		
Washburn	Island L	2470600	276	Other	37		
Washburn	L Nancy	2691500	772	Other	93	Other	14
Washburn	Leach L	2474400	30	Other	12		
Washburn	Leisure L	2475000	75			Other	3
Washburn	Little Long L	2664500	112	Other	5		
Washburn	Little Mud L	2107100	71	Other	27		
Washburn	Little Sand L	2477700	74	Other	11		
Washburn	Little Stone L	1862400	27	Other	2		
Washburn	Long L	2106800	3290	1-2 Year Pe	1217		
Washburn	Matthews L	2710800	263	1-2 Year Pe	4	Other	7
Washburn	Mclain L	2481600	150	Other	21		
Washburn	Middle Mckenzie L	2706500	530	Other	66	Other	11
Washburn	Minong FI	2692900	1564	Other	542		
Washburn	Mud L	2107700	103	Other	5		
Washburn	Pavlas L	2488100	44	Other	3		
Washburn	Rice L	2696000	132	Other	50		
Washburn	Ripley L	2492600	190	Other	26		
Washburn	S Twin L	2494500	115	Other	16		
Washburn	Shell L	2496300	2580	Other	876	Other	29
Washburn	Silver L	2496900	188	Other	26		
Washburn	Slim L	2109300	224	Other	30		
Washburn	Spring L	1882900	42	Other	3		
Washburn	Spring L	2498600	211	Other	29		
Washburn	Stone L	1884000	39	Other	3		
Washburn	Stone L	1884100	523	Other	65		
Washburn	Tozer L	2502000	36	Other	2		
Washburn	Trego L	2712000	451	Other	57	Other	10
Washburn	Un L	2542800	30	Other	2		